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The purpose of this study was to determine (1) what effects a teacher who was helped to understand basic art ideas would have on the development of these ideas in culturally deprived 6-year-olds, as expressed in their verbal language and in their art products in clay, and (2) whether or not there would be a difference in the development of these ideas in Negro and white children and their teachers. Subjects were 110 children and four teachers. There were four groups: white control, white experimental, Negro control, and Negro experimental. Experimental teachers were instructed in four basic art criteria for visual materials: (1) what it was, (2) who did it, (3) how he did it, and (4) whether he could do it with another material. Seven sharing sessions were taped and rated. The experimental groups exceeded the control groups in verbalization on all criteria and for all sessions. The white groups exceeded the Negro groups on all sessions and on all criteria. In the clay products class, significant differences at the .01 level in favor of the last session over the first were found for the experimental groups and for the white groups; no significant difference at the .05 level was found for the control groups or the Negro groups. (DO)

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THE EFFECTS OF TEACHER IN-SERVICE EDUCATION ON THE DEVELOPMENT OF ART IDEAS WITH SIX-YEAR OLD CULTURALLY DEPRIVED CHILDREN

Final Report December 1967

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Chapter I

Introduction

While contemporary interest in teacher education is centered on preparing teachers for working effectively with the culturally deprived child, one focus of concern should be in-service education for teachers in the field. Goldberg (1967) states in this connection that "one of the most important areas for study relates to teacher education and reorientation." Van Til (1965) reminds us that "changing the curriculum necessitates changing the people who have relationships to the actual learning experiences of children." Thus, he, too, points up the critical need to continuously up-date the education of teachers in the field. A part of in-service teacher education, however, is the developing and testing of materials for use in teaching. Goodlad (1964) recommends that this be done "with children and youth representing divergent cultural groups especially from disadvantaged environments." He sees the need to "develop curricular sequences from the bottom up instead of the top down thus opening up interesting possibilities for relating longitudinal subject matter sequences to the developmental processes of children and youth." An area not yet explored for this possibility is in the field of art.

If the curriculum is to be developed from the bottom up, the early school years must be considered. Deutsch (1962) bears this out through his research on stimulating intellectual powers of young children. His work, however, overlooks the area of humanities, a rich field for developing verbal and non-verbal language, and concepts and perceptions as they relate to the visual arts. In recent surveys by Sears and Dowley (1963) and Harris (1963) no mention is made of the process of idea development or aesthetic perceptual training in connection with the exposure of the young child to art. Yet, McWhinnie (1964) stresses that "ever increasing importance of visual as well as verbal communication in our society may make it necessary to concentrate upon perceptual training in the art program." McFee (1961) has suggested that visual literacy may become one of the important aims of art education in the future. Goodlad concludes that the "fine and applied arts...virtually pushed aside as 'frills' during the past decade...may, one day, have a place in the curriculum, along with science, mathematics, and foreign languages." He speaks of the need to balance the curriculum by including the humanities for "it is believed that the arts can not only contribute to the understanding and attitude needed to stay an ever-threatening holocaust but can also contribute significantly to man's quality in a world which, hopefully, will survive."

Though extensive efforts are being exerted to update teachers in the field through in-service education in the academic areas, the

need for in-service education in the visual arts has been almost totally overlooked. Evidence of the need is glaring. Since the culturally deprived child is most lacking in this area, due to the paucity of his environment, special emphasis should be placed here.

Douglas and Schwartz (1967) have found that both culturally advantaged 4 year old and culturally deprived 5 year old children can grasp basic art ideas, talk about them, and put them into action in clay modelling when the teacher is furnished visual art materials and is helped to observe and pose leading questions concerning this material. If teachers in the field are to build adequate art programs emphasizing these areas, ways must be found to help them. Thus, from the standpoint of theory and research, there is need for experimental studies in improving art curricula and teaching through in-service education.

The purpose of this experimental study in improving art curricula and teaching was to explore: 1) what effects a teacher helped to understand selected basic art ideas (See Appendix F) can have on the development of art ideas of culturally deprived 6 year old children as expressed both in verbal language and art products in clay, and 2) whether or not there is a difference in the development of these ideas between negro and white children and their teachers.

Chapter II

Method

I. Population

Four groups of 6 year old children from culturally deprived areas were involved: two for experimental purposes, and two for control. These groups hereafter are designated as E (experimental) and C (control). The four teachers, one negro (NE) and one white (WE), experimental, and one negro (NC) and one white (WC) control, shared similar educational background and years of teaching experience.

The population initially consisted of 110 children: 58 boys and 52 girls. This number shifted during the study due to mobility of the subjects. In collecting the data for the discussion groups no attempt could be made to control numbers of children. For the clay products, however, any child missing more than one session was eliminated from the study in order not to penalize his group mean score. Children born before January 1, 1960, (older that 6 years 9 months) were eliminated to keep the groups within the standard first grade age level. A population of 85 was used: 41 boys and 44 girls. The mean chronological age of the control group exceeded that of the experimental group by 16 days. The mean chronological age of the negro children exceeded that of the white children by 29 days.

II. Procedures

The study was designed to help two experimental teachers to look at ceramic pieces and other related visual material, to understand the basic art ideas underlying the pieces, and to pose appropriate questions concerning the four basic art criteria (See Appendix B) : I) what is it, II) who did it, III) how did he do it and IV) could he do it with an alternate material. During the sharing session each experimental teacher elicited observational and verbal responses from the children for as long as she could hold their attention. The children were then asked, "Can you 'talk' with clay?" Clay was available for them. During the period between sharing sessions the experimental teachers were encouraged to use clay and emphasize at opportune moments the art ideas underlying the study.

Before each of these sessions an attempt was made to involve both experimental teachers in a group discussion in preparing them to share the ceramic pieces with the children. It was difficult to find time when both teachers were free so individual meetings were scheduled.

Most of these meetings took place immediately before the sessions with the children in an effort to put minimum drain on teacher's time.

The two control teachers shared the same ceramic and other visual art materials with their children without help from the researchers. The children had a work period at the end of the discussion where clay was available. One control teacher indicated an interest in evaluating her work with the children.

These sharing sessions fit into a regular phase of the school day when teachers shared with their children experiences or objects brought from home. All four teachers chose the last period of the day so as not to interfere with the subject matter courses. All of the children came to the study session after a physical education period with the exception of one control group which had a study work period.

Each group had seven sharing sessions at least two weeks apart. A new ceramic piece furnished by the researchers was shared by each teacher with her children at each session.

III. Visual Materials

Ceramic works shared varied in size from 2½ to 24 inches in height and included both glazed and unglazed pieces. They consisted of: three small abstract pieces, three bird sculptures, a bird pot, a human form, and a clay bull (See Appendix A). Pieces were selected to demonstrate the artist's sensitivity to possibilities and limitations of the use of the medium, textural surface qualities, exaggerated forms, decorativeness and humor. Two pieces represented different cultures: one historic American Indian and the other folk Mexican.

Beginning with Session #3 (Owl) the researchers introduced other kinds of visual art materials to strengthen the concept desired in Criterion IV: could he do it with alternate materials. These consisted of collages, constructions, prints, and when appropriate, the children's own art work.

IV. Data and Instrumentation

Tape recordings for each discussion session were made and transcribed. These transcriptions were coded and matched to the ceramic piece discussed. Three judges rated them on a descriptive continuum scale for each of the four criteria (See Appendix B).

The clay products were photographed in the classroom through the use of a Polaroid camera immediately after the children produced them. Children's comments were attached to these photographs which were mounted, coded, and rated by three judges on a verbal and visual continuum scale based on use of the medium (See Appendix B).

Scores for the verbalization and mean scores for the clay products were obtained for each session for the experimental and control, and for negro and white groups. The differences between control and experimental and negro and white groups in verbalization were so significant that it was decided to present the data in graph form. A direct difference method was used to test for differences between the groups on clay products.

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Chapter III

Results

No pre-test was run, therefore, the data presented reflect in-service education in all sessions.

1. Verbalization

The verbalization data are such that any discussion to be clear must be portrayed in graph form.

There was a significant difference between the experimental and control groups on each of the four criteria. At no time did the mean score of the C group equal that of the E. Figure 1 reveals the mean verbal scores for all sessions on each of the four criteria by E and C groups. The greatest difference between the two appeared on Criterion III, 6.1. The smallest difference between the two, 2.1, was on Criterion IV.

When the groups were divided into negro and white, the latter exceeded the former on all criteria although the mean scores were closer together than the E and C. Figure 2 shows mean verbal scores for all sessions by criteria for negro and white groups. The pattern is almost parallel with two peaks, 1.2 points apart, on Criteria I and III.

When the scores are considered by sessions, again there is a significant difference in the E and C groups. In Figure 3 are indicated the total verbalization scores for each session for E and C groups. The highest score of the C does not equal the beginning score of the E group. For the E group the mean gain ranged from 15.9, first session score, to 25.2, the last session score. For the C group the mean gain ranged from 2.0, first session score, to 4.25, the last session score. The greatest mean difference between the two groups occurred during the 5th session (Bull), 28.2, and the least mean difference on the 2nd session (Bird), 11.0.

When negro and white were separated with regard to total verbalization scores for each session, Figure 4, the W group exceeded the N group on all sessions although the group scores are closer together than were the E and C groups. Both showed gains between the first and last sessions. The N gain was from 7.4 on the first session to 12.0 on the last; and the W group was from 10.6 on the first session to 17.5 on the last session. The two almost merged on the second session with a difference of only 0.4.

Examining the scores in Figure 5 a clear cut difference is revealed

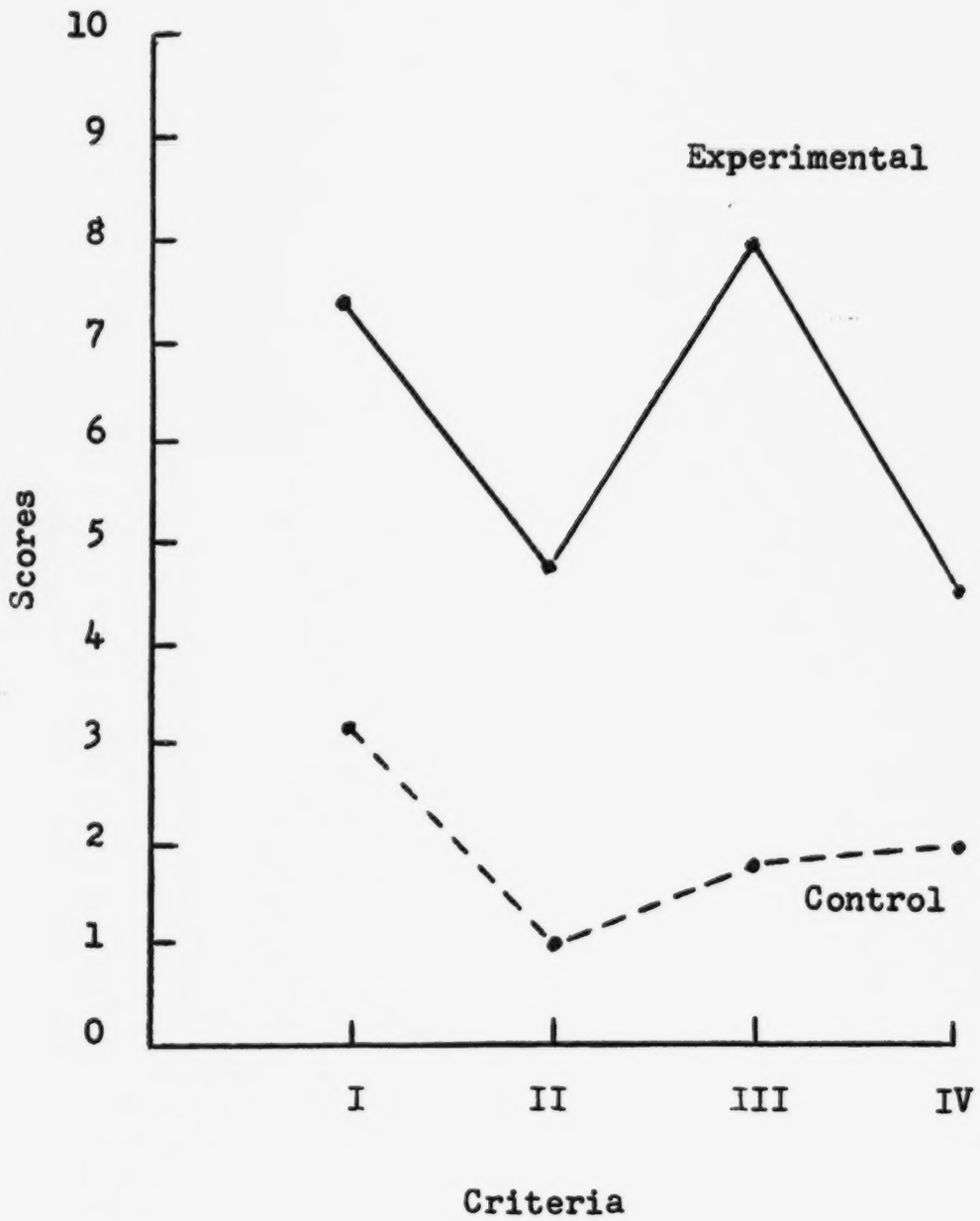

FIG. 1. MEAN VERBAL SCORES FOR ALL SESSIONS BY CRITERIA OF EXPERIMENTAL AND CONTROL GROUPS

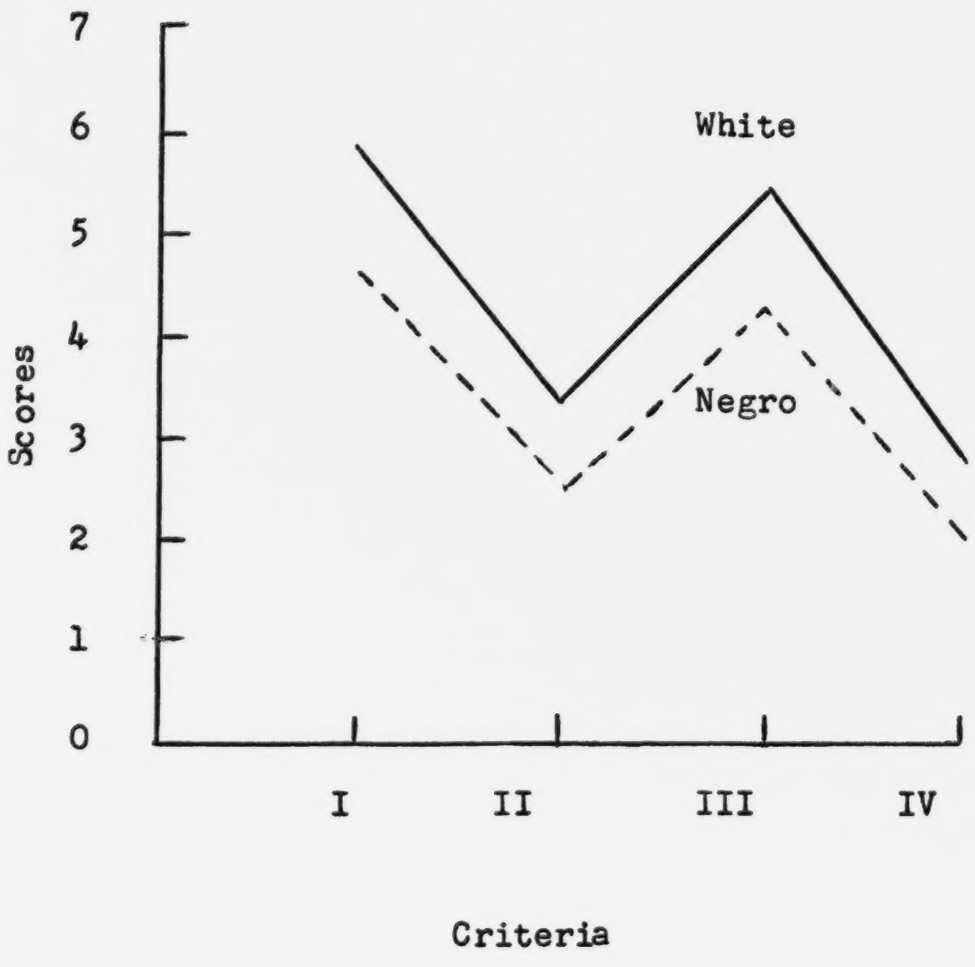

FIG. 2. MEAN VERBAL SCORES FOR ALL SESSIONS BY CRITERIA FOR NEGRO AND WHITE GROUPS

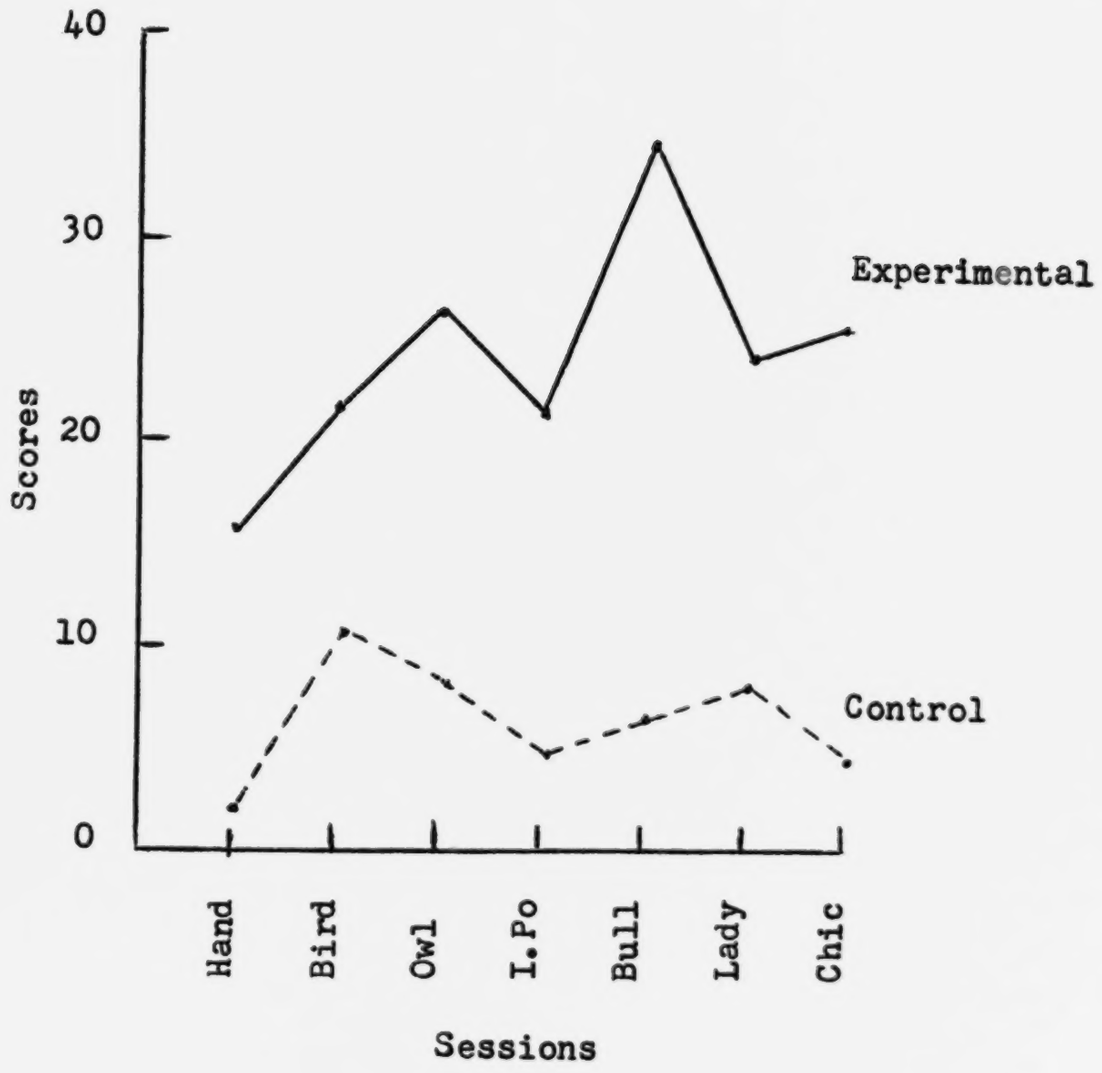

FIG. 3. VERBAL SCORES BY SESSIONS FOR EXPERIMENTAL AND CONTROL GROUPS

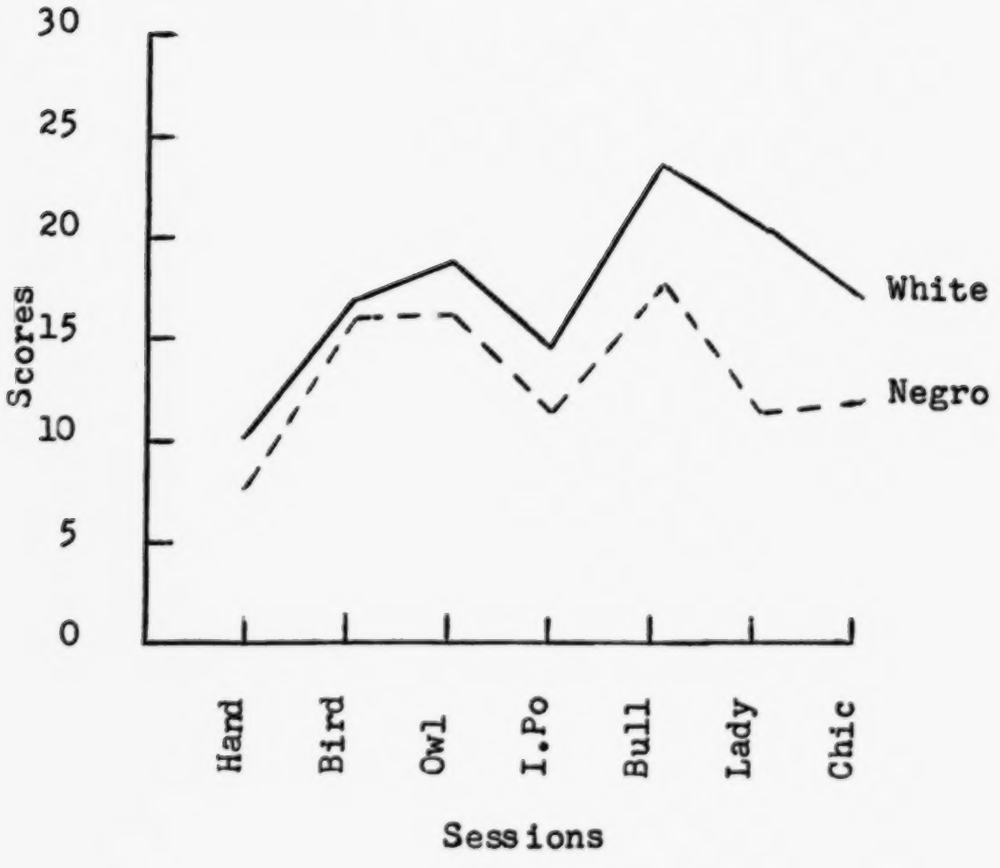

FIG. 4. VERBAL SCORES BY SESSION FOR NEGRO AND WHITE GROUPS

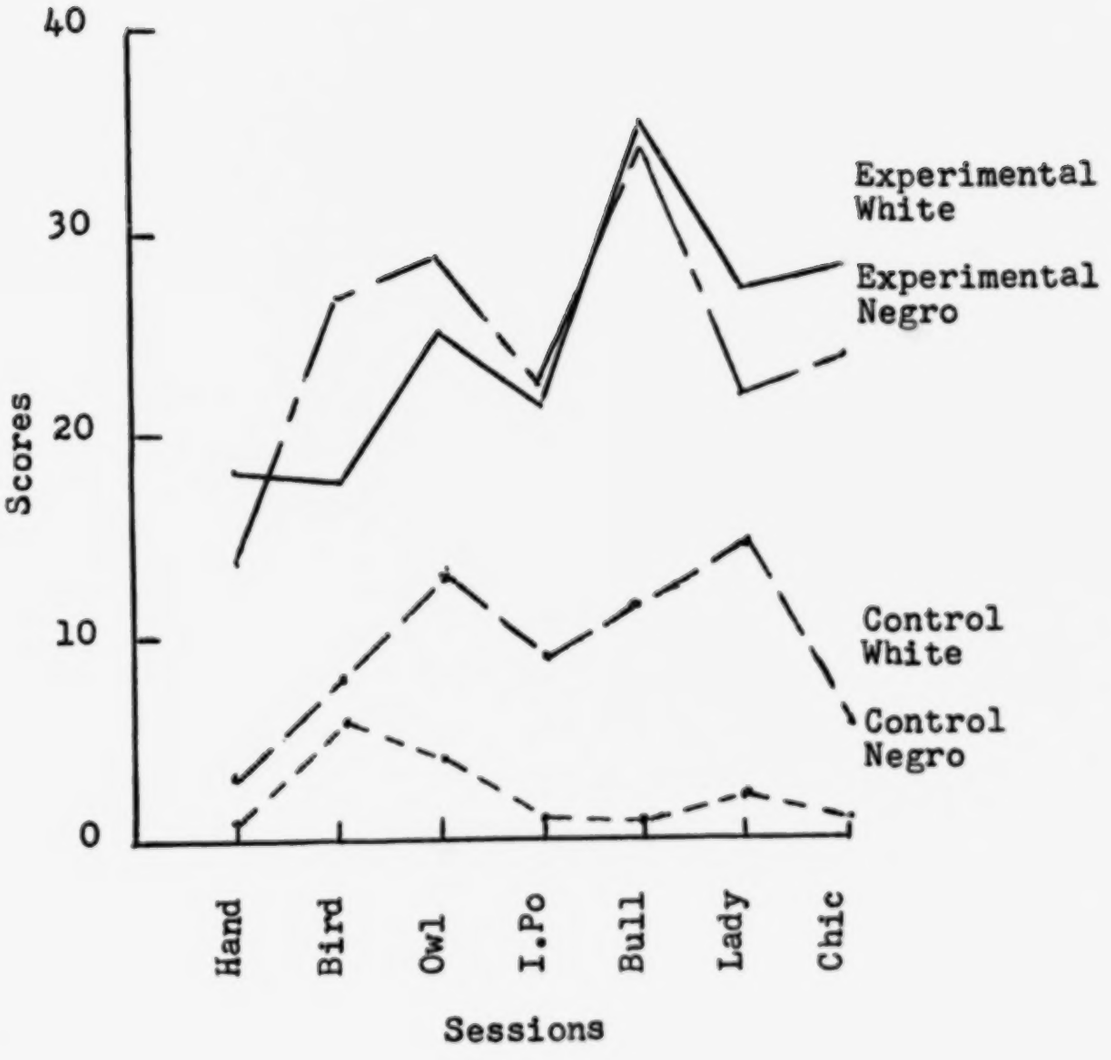

FIG. 5. VERBAL SCORES BY SESSIONS AND TEACHERS

between the E and C groups on each of the seven sessions. The high score in the C group exceeded the lowest score of the E by less than one point. Within the two groups there are obvious differences. The white C group children exceeded the NC in all sessions, the greatest difference occuring on the 6th session (Lady) and the least difference on the 1st and 2nd sessions (Handies and Bird). The white C group never reached either of the E groups with the exception of the first session of the Negro E. The highest score of the white C exceeded the lowest score of the Negro E by 0.5 points. In the E group the curve is similar. The Negro E, however, exceeded the white E three out of the seven sessions (Bird, Owl, and Indian Pot). It is significant that the beginning and ending scores of the Negro C were identical. For the white C group the ending score exceeded their beginning score by only 2.5 points. The ending score of both the Negro E and the white E groups was 9.3 points above their beginning scores.

In looking at the mean verbalization scores for all sessions by criteria, as in Figure 6, significant differences can be noted. A real difference is seen between Negro C and white C groups but similar pattern of development between Negro E and white E. The Negro C group, the lowest of the four, scored only on Criteria I and II. The white C followed the same pattern as the E groups but at a much lower level. The Negro E group scored lower on Criteria I and IV, equalled the white E on Criterion II, and exceeded them on Criterion III.

II. Clay Products

The direct-difference method was used to test for significance of difference between the first and last session product scores of children in each of the groups: Experimental-Control and Negro-White.

In both the W ($t=5.43$, $df=39$, $p < .01$) and the E ($t=8.421$, $df=38$, $p < .01$) statistically significant differences were found between the mean product scores of the first and last session in favor of the latter.

In both the N ($t=1.09$, $df=43$, $p > .05$) and the C ($t=.964$, $df=42$, $p > .05$) no significant differences were found between the first and last sessions.

According to Figure 7 there is a significant difference between the scores of the E and C groups after the first session. Although on the first session the scores were the same, the developmental trend was different. Where the E group continued to climb reaching a peak at the 5th session (Bull) the C group fell and slowly climbed or stayed about the same until the last two sessions (Lady and Chicken). The last session reveals an upward trend for the E and a downward trend for the C group. The gain for the C group was 0.2 points, from a 3.9 at the beginning session to a 4.1 at the last. The gain for the E group was 1.0 point

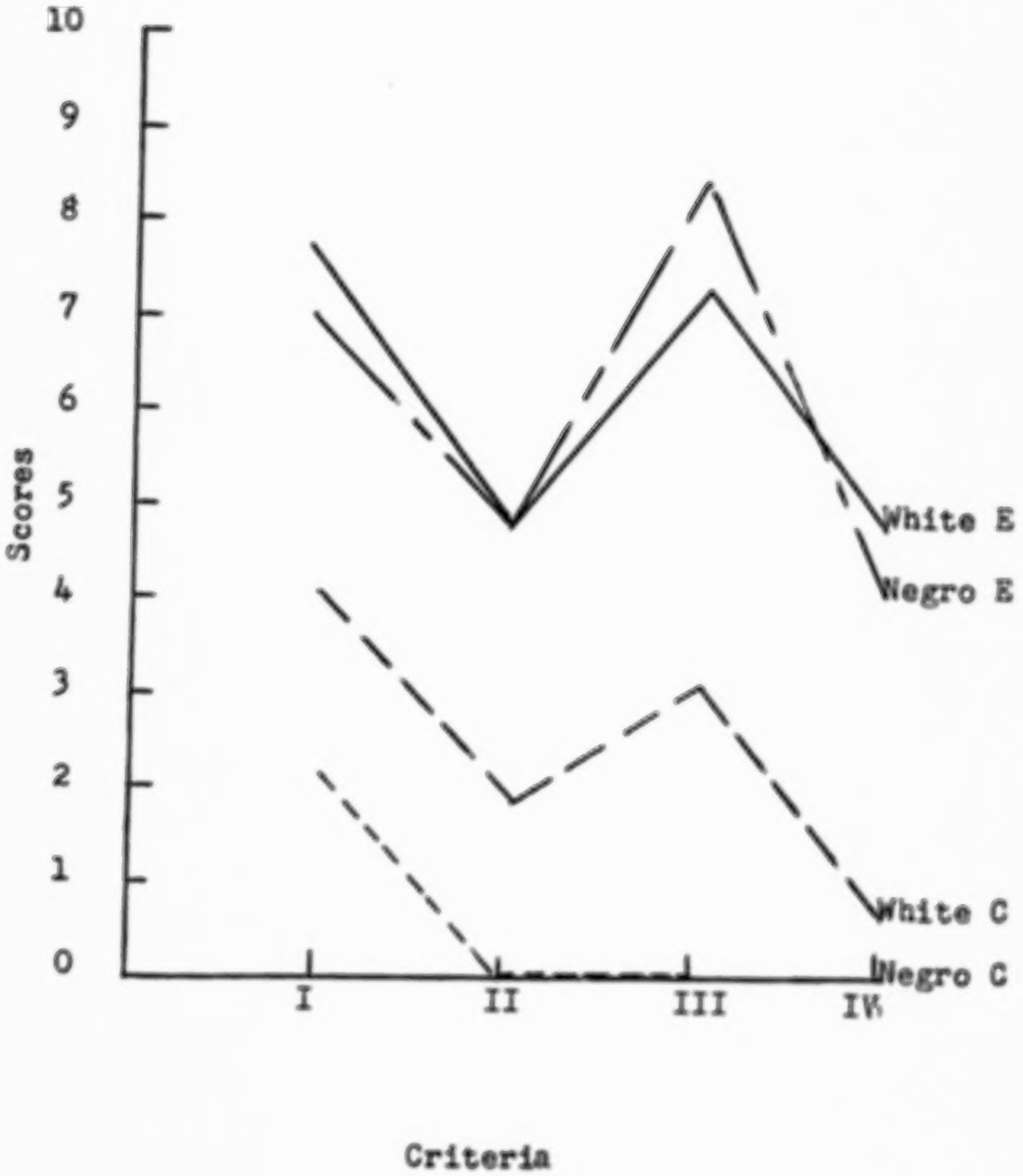

FIG. 6. MEAN VERBAL SCORES FOR ALL SESSIONS BY CRITERIA OF EXPERIMENTAL AND CONTROL GROUPS

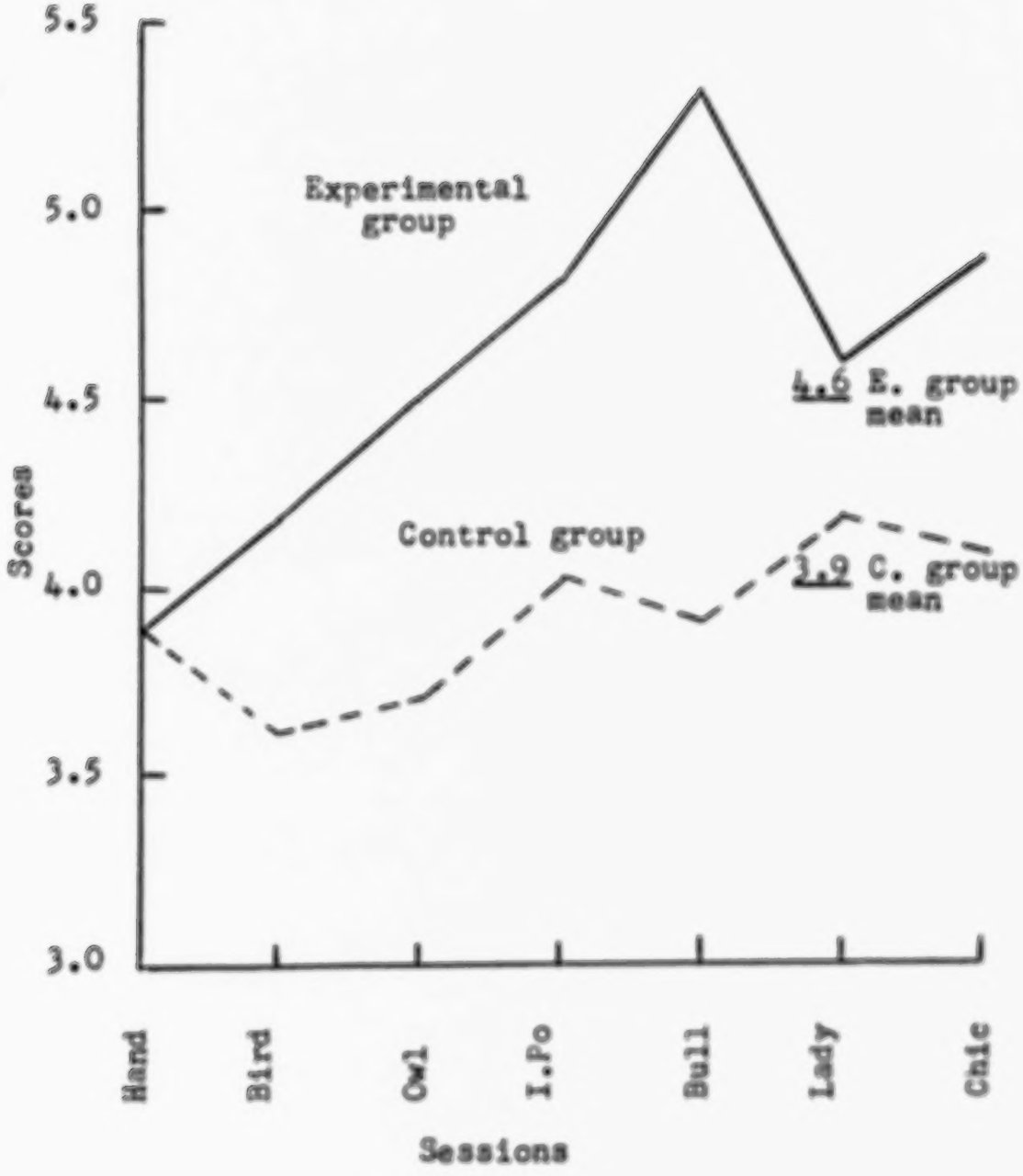

FIG. 7. MEAN PRODUCT SCORES FOR EACH SESSION FOR EXPERIMENTAL AND CONTROL GROUPS

from 3.9 at the beginning session to a 4.9 at the last session.

There was less difference between the W and N groups than in the E and C. As seen in Figure 8 the W mean product scores exceeded the N at every session, the greatest difference coming at the 6th session (Lady), a difference of 1.4 points, and the least difference coming on the 2nd session (Bird), a difference of 0.1.

The mean product score for the W group was 4.6 and for the N 3.8.

Figure 9 indicates the mean product scores for all sessions for the four groups. It can be noted according to over-all means that the widest differences occur between white E and Negro C whereas the white C and Negro E are very close. Over-all mean scores ranged from 3.1 for the white E, 4.4 for the white C, 4.3 for the Negro E, to 3.6 for the Negro C group.

The Negro C group equalled their first session (Hand) mean score only on the 5th session (Bull). All other sessions were lower. Their last session mean score was 0.3 points lower than their first session mean product score.

The white E group exceeded the mean product scores of all groups on all sessions except on the 2nd session (Bird) at which time the Negro E scored higher by 0.2 points.

The Negro E exceeded the white C group on three sessions, 2nd, 3rd, and 5th. The white C group started with a higher mean product score (Hand) than the Negro E by a 0.4 of a point and on the last session (Chicken) exceeded them by 0.3 points.

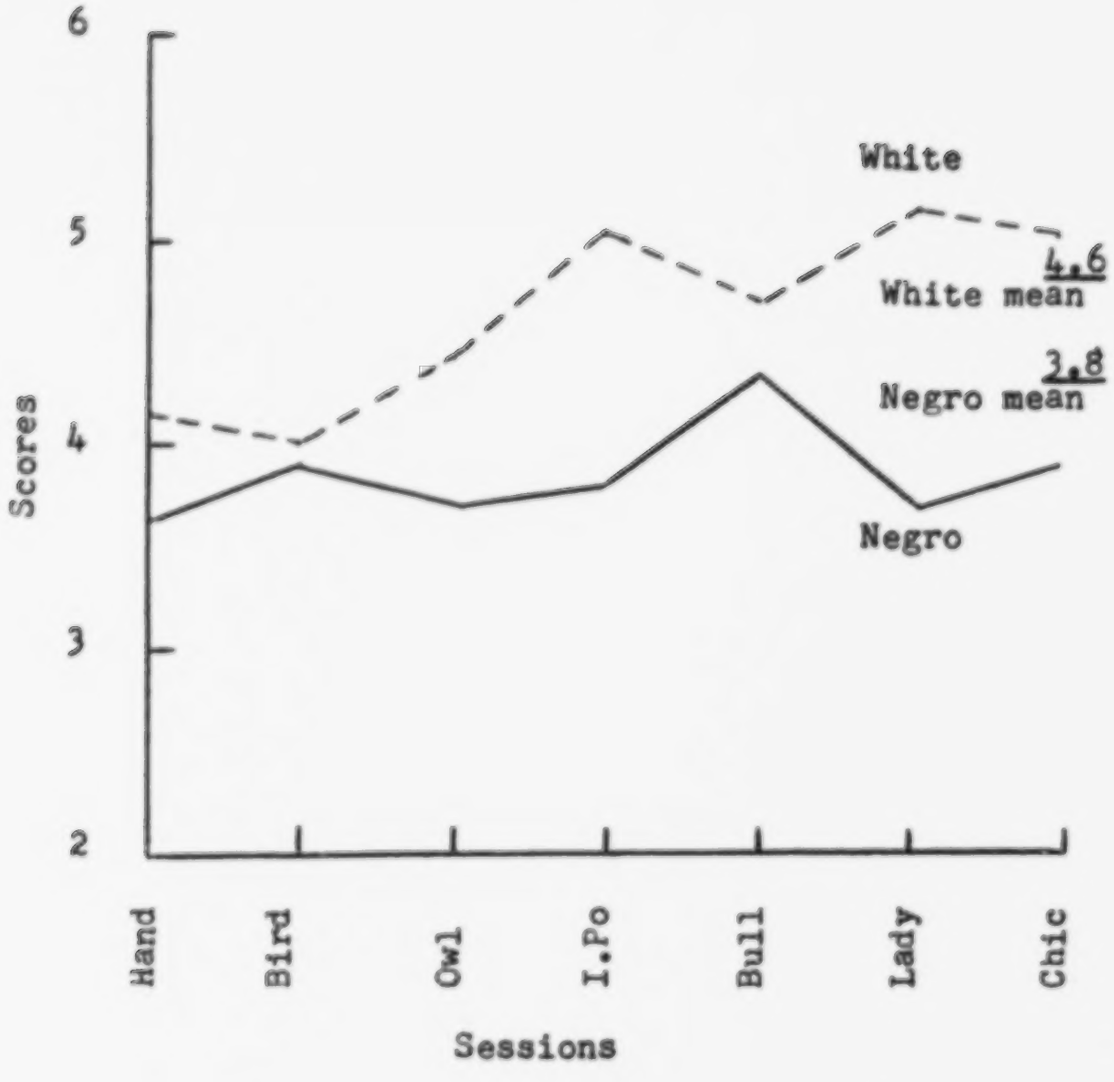

FIG. 8. MEAN PRODUCT SCORES OF WHITE AND NEGRO GROUPS OVER THE SEVEN SESSIONS

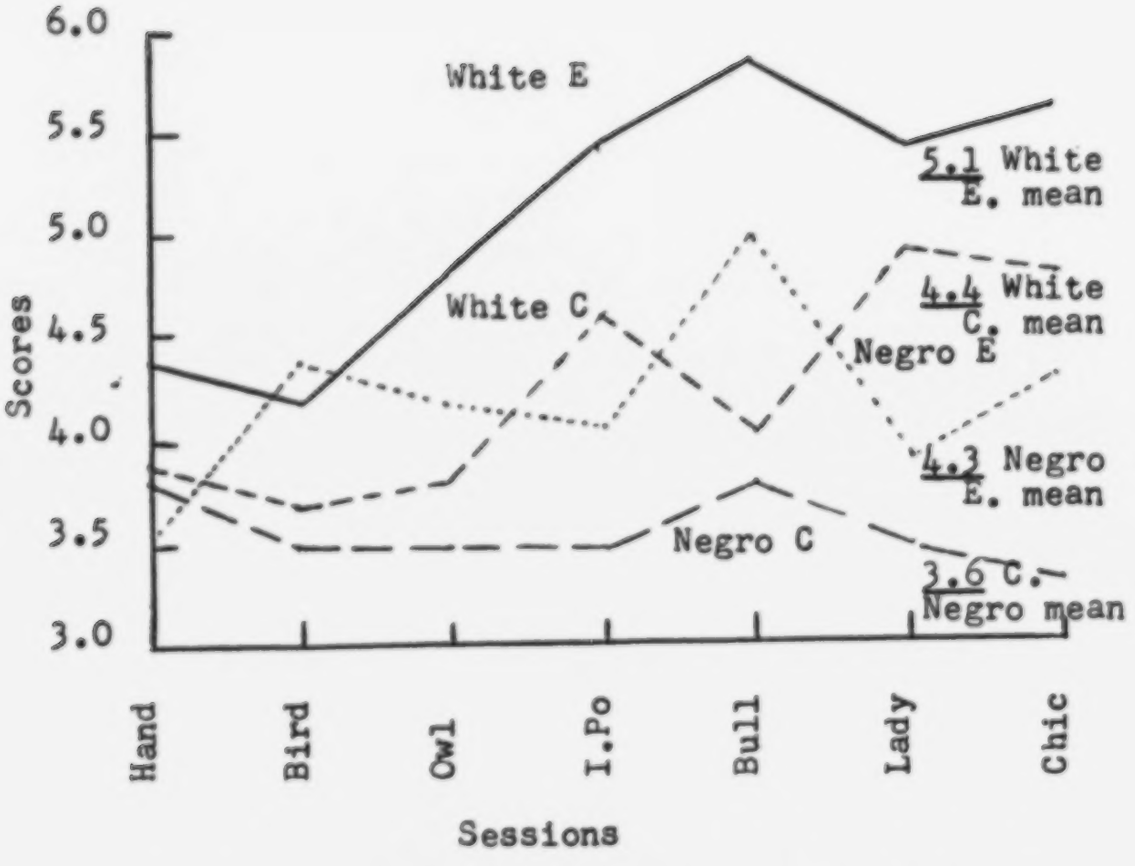

FIG. 9. MEAN PRODUCT SCORES FOR EACH SESSION OF EACH GROUP

Chapter IV

Discussion

1. Verbalization

As indicated in the results there was much variation in scores within the groups and on the four criteria. In order to determine possible causes for this variation the mean verbal scores for each group were portrayed by graphs on each criterion. The C group's mean scores are shown in Figure 10. Criterion I (what is it) scored highest for all sessions. The abrupt increase on the second session is unaccounted for; but whatever influenced this score also appeared to have affected Criteria II and III. Since no visual stimuli were used other than the ceramic piece itself one must assume that this art work had meaning for the teachers as well as the children.

It is interesting to note that there was no significant gain in the scores between the first and last sessions for Criteria II, III, and IV, .1, .5, and .5, respectively. Criterion I showed a 1.5 point increase. Despite the fluctuations, these children and their teachers profited very little from the shering sessions. It is amazingly clear that these teachers lacked background knowledge for understanding basic ideas of art from which to pose questions which could help the children to observe, question, understand, and discuss pieces which obviously captured their attention when presented.

The pattern for the E group as revealed in Figure 11 shows a wider range of fluctuation on the four criteria. The lack of gain between the first and last sessions for Criteria I and II poses several questions. Were the ideas or concepts dealt with on too global a basis, were they too abstract or difficult, or had the children reached a level of maturation beyond which they were unable to proceed at this point.

The large increase in scores in the 5th session (Bull) for all criteria is unaccounted for other than the fact that the ceramic piece had great appeal to the children. Fewer kinds of auxilliary materials were used with the 3rd session, for example. One reason for this jump in the Negro E group could have been the fact that for this session the teacher had laryngitus and one of the researchers posed the questions.

The most striking growth occured in Criteria III and IV where gains of 5.1 and 7.0 points, respectively, were made between the first and last sessions. The importance of in-service education for teachers in helping children is demonstrated here. Where the control group (See Figure 10) remained almost totally unaware of how the artist works and the materials he may choose to use the experimental group children grew

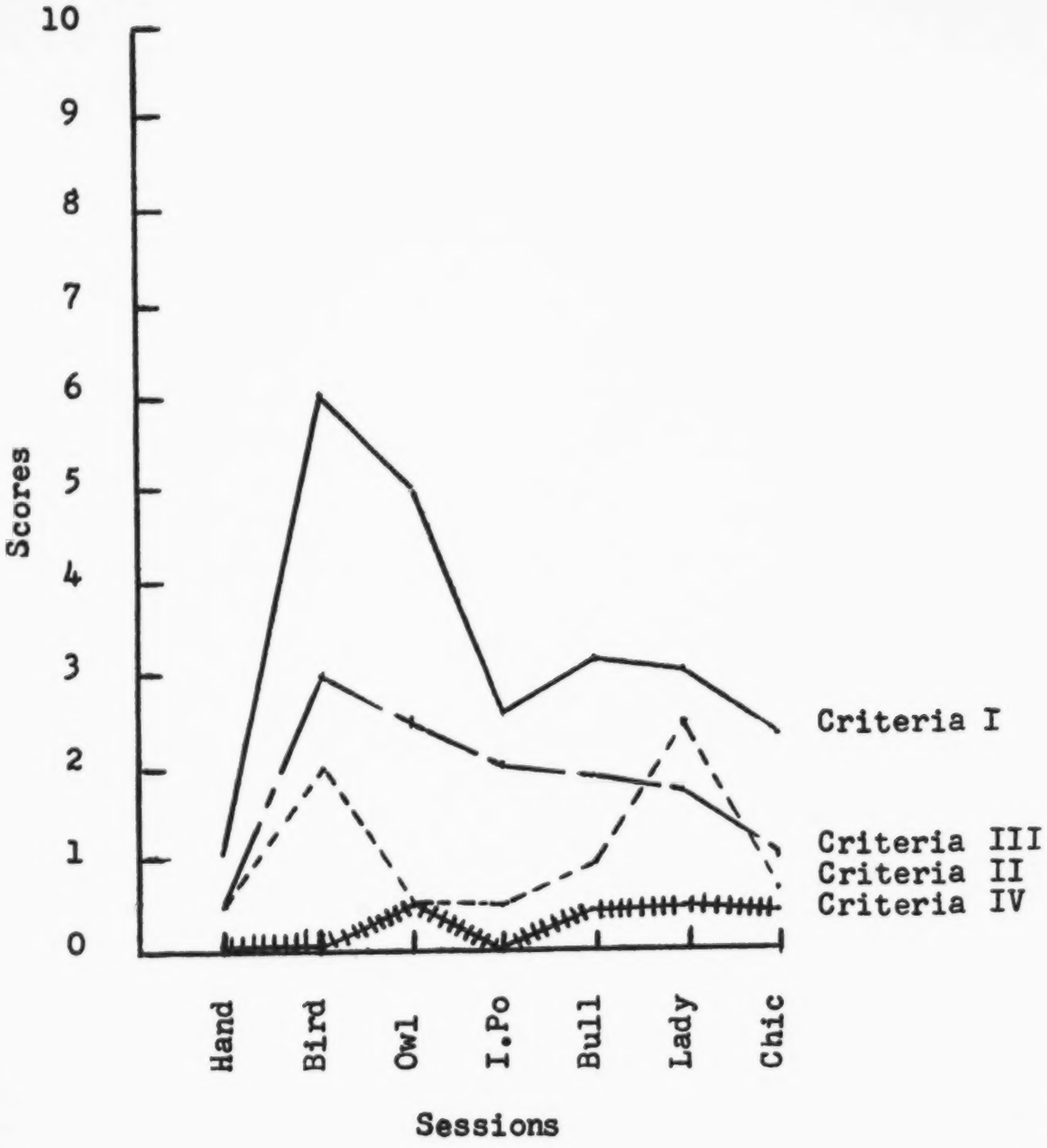

FIG. 10. MEAN VERBAL SCORES ON FOUR CRITERIA. CONTROL GROUP

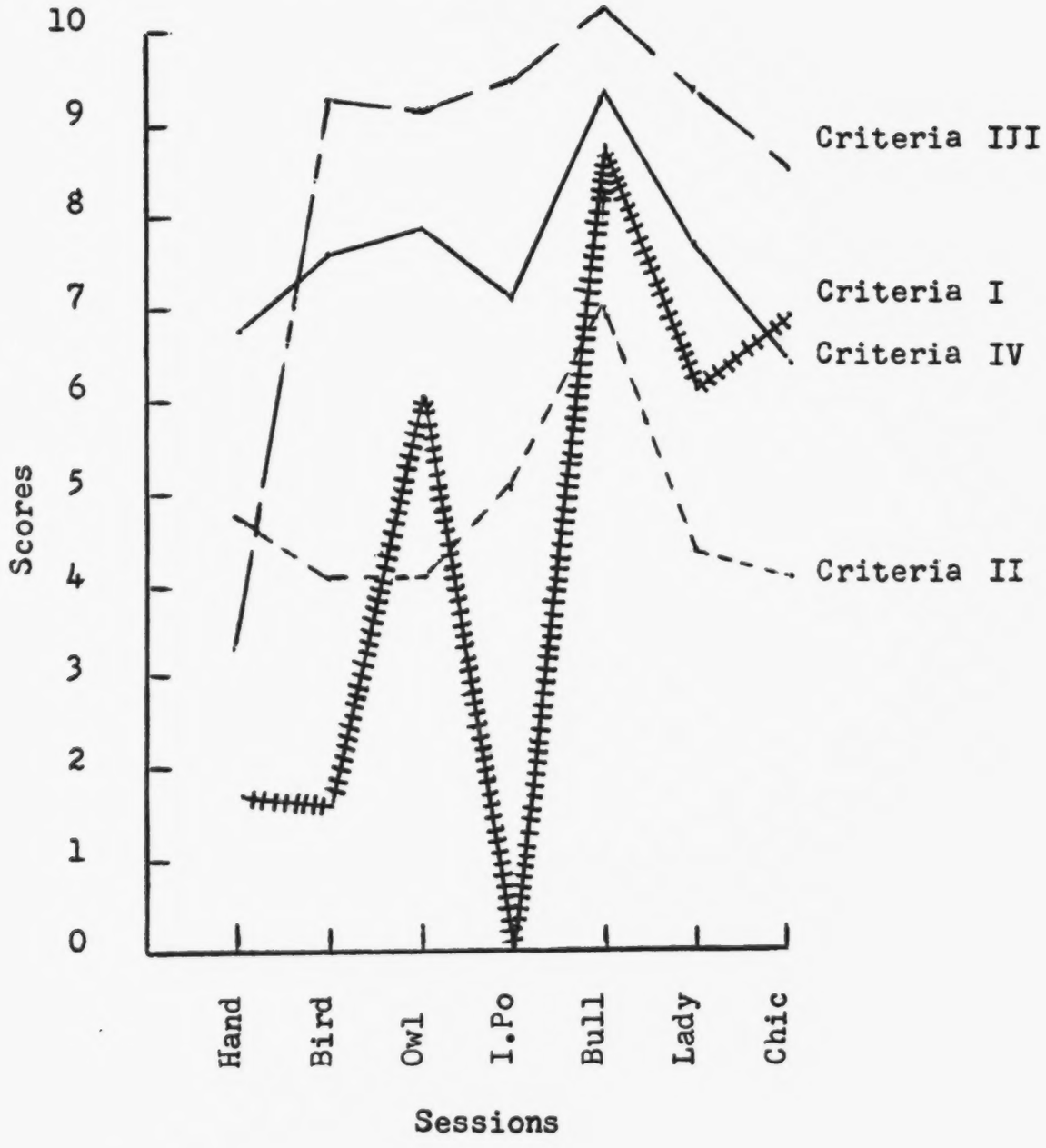

FIG. 11. MEAN VERBAL SCORES ON FOUR CRITERIA. EXPERIMENTAL GROUP

in knowledge and understanding and were able to communicate these understandings in group discussions (See Appendix C for sample transcriptions.) When the E and C groups are separated into negro and white, (See Figure 5) there is little difference between the white E and the negro E groups. On Criterion II (See Figure 6) the scores were identical and on Criterion III the negro E exceeded the white E. The white C group was significantly higher than the negro C on all criteria with the greatest difference, 3.5 points, on Criterion III. The negro C was unable to score on Criteria III and IV. The white C group (See Figure 6) followed the same pattern as the negro E and white E groups but at a much lower level. It is evident here that the white C teacher had the advantage over the negro C teacher in verbalizing with her children. With in-service education the negro E teacher was able to compete with the white E teacher and to exceed on Criterion III. This criterion, how did he do it, evidently was within the comprehension of these children. It is significant that these experimental children who have a language handicap were able to exceed the white children in describing how the artist did it, whereas their counterpart in the control group was unable to score.

II. Products

From the diverging pattern of development in mean product scores after the 1st session, Figure 7, it becomes evident that the E groups were profiting from teacher in-service education which the C group teachers were not getting. Figure 9, however, indicates that the negro E teacher was not as effective as the white E teacher in using the help available to her. Her group's performance seems inferior to the white control which aside from a small loss on the 2nd session and a greater loss on the 5th continued an upward trend through the 6th with a gradual decline noted on the last session. The negro E, on the other hand, with a shift upward at the 2nd session is followed by lower mean product scores on all of the succeeding sessions with the exception of the 5th at which session, as has already been mentioned in the verbalization, a researcher took over in posing questions for the children due to the negro E teacher having lost her voice. Then, too, during the work sessions this teacher was noted as having a tendency to sit at her desk doing other work rather that helping her children apply the art ideas while they were modelling in clay. Her frequent admonition, "Use your own ideas!" may have actually been a hindrance rather than a help. It was noted that the E children who were not given technical help at the moment it was needed had a tendency to revert back to previous flat patty and other stereotyped forms or to lose interest entirely. Children who received attention were able to develop increasingly large, upright, detailed and well constructed forms of their ideas. Their interest and involvement mounted and so did their work period time. Some children were still working at the end of the hour. One such child in the white E group asked to keep his piece so that he could work on it the next day to complete it.

Though the C group mean product scores, Figure 7, on the last four sessions were a little higher than their initial session score the pattern of development of the negro group, Figure 9, was downward with the exception of the 6th session. It was the white C group which made a sharp rise in mean product score during the 4th and the 6th and almost maintained this level at the last session. The white C group was able to perform on a higher level that the negro C throughout. Without help from their teacher the white C children seemingly were able to develop on their own a little of the basic clay techniques needed whereas the negro C children were not.

It is interesting to note that the last session mean product scores of both the E groups indicate a rise whereas those of the C groups show a dip. Whether or not this would continue is unknown.

The E Boys and Girls

With regard to the over-all mean product scores of the E group, Figure 12, the W boys and W girls tied for high place, 5.1, the N boys scoring 4.3 and the N girls 4.1. The differences between the first and last session mean product scores are also of interest since the W boys exceeded the gain made by the W girls and the N boys again outscored the N girls. These scores were as follows:

W boys (4.1 to 5.6) a gain of 1.5
W girls (5.0 to 5.7) a gain of 0.7
N boys (3.5 to 4.7) a gain of 1.2
N girls (3.4 to 3.9) a gain of 0.5

Both E group boys made greater gains than the E group girls, the white E boys starting much lower, 0.9 point, than the white E girls and ending up only 0.1 lower and, as already stated, with the same over-all mean score. The negro E boys started only 0.1 point higher than the negro E girls but ended up 0.8 point higher. Both white E boys and girls far exceeded the negro E boys and girls on all sessions except the 2nd. The trend of the negro E boys and negro E girls was similar with the former exceeding the mean product scores of the latter on all sessions except the 5th. Though the high peak of the E groups mean product scores, 5.8, was made by the W boys (Indian Pot) they exceeded the W girls only three times (Bird, Indian Pot, and Lady) and scored the same on the 5th session.

The C Boys and Girls

The over-all control group mean product scores, Figure 13, again show that the W boys were superior to the W girls and the N boys to the N girls, these scores being: W boys, 4.5; W girls, 4.0; N boys, 3.8; and N girls, 3.3. The differences between scores on the first session

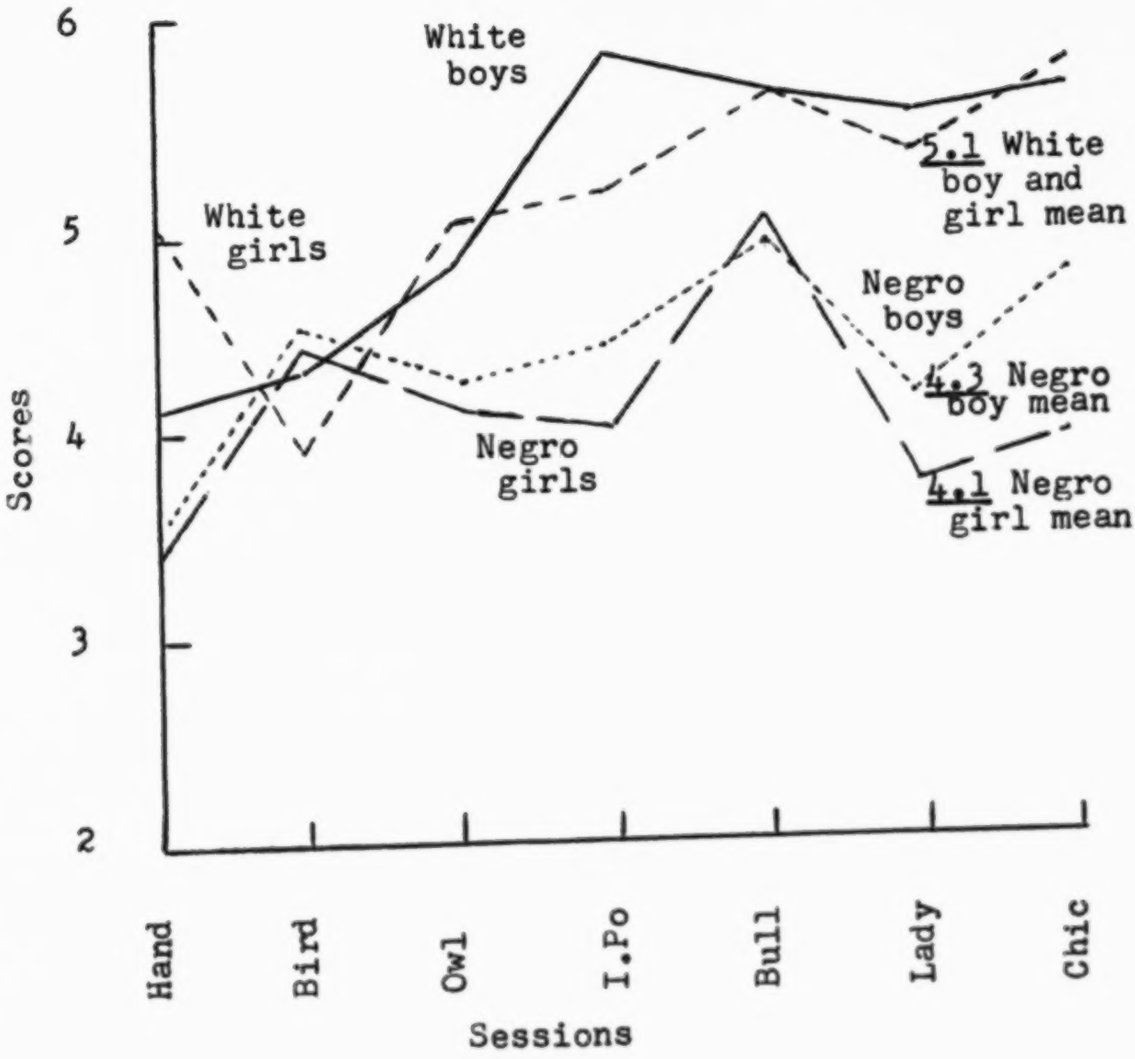

FIG. 12. MEAN PRODUCT SCORES ON SESSIONS OF BOYS AND GIRLS IN EXPERIMENTAL GROUPS

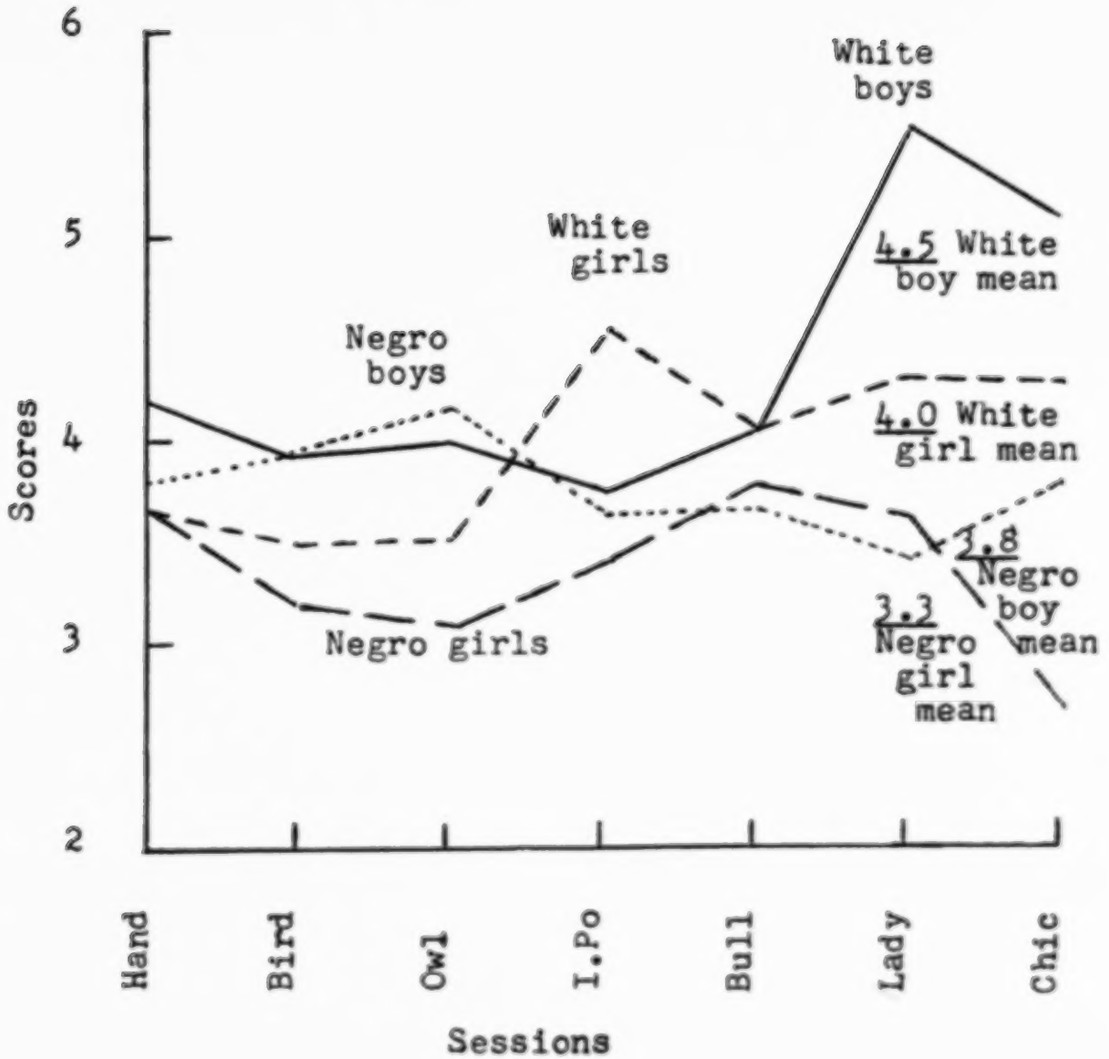

FIG. 13. MEAN PRODUCT SCORES ON SESSIONS OF BOYS AND GIRLS IN CONTROL GROUPS

and the last session were as follows:

W boys	(4.2 to 5.1)	a gain of	0.9
W girls	(3.7 to 4.3)	a gain of	0.6
N boys	(3.8 to 3.8)	a gain of	0.0
N girls	(3.7 to 2.7)	a loss of	1.0

The N girls exceeding the N boys. The reverse was true of the white children.

The white C boys made higher scores than the white C girls on all sessions except the 5th at which time they tied. The pattern of these two groups is roughly parallel with peaks on the 4th and 6th sessions. The Negro C boys tied on mean product scores during the 1st session with the Negro C girls and exceeded them on all sessions except the 5th and 6th.

III. Other Observations

E Groups and Experience Stories

Starting with the 4th session in an attempt to help the E teachers to emphasize art concepts dealt with in the discussion circle the researchers encouraged them following sharing-work sessions to develop experience stories with the children. Again the differences between the white E and Negro E teachers was noted by the researchers in the desire to follow through. The former teacher after the 4th session developed experience stories with each of four children in her group. These stories, typed in large manuscript and illustrated with photographs of the children's clay products were developed into a booklet and given to her at the next session to use with her children. (See Appendix E.) Following this session the teacher took a small reading group and shared the book with them. These children who had been slow in gaining reading skills and expressed boredom with the reading text were so excited over their own text that they read it through easily, one boy asking, "May I take it home to read to my mother?"

Booklets were also made for the E teachers emphasizing the art ideas explained in relation to sharing the Mexican Bull and Lady pieces in sentences on the children's level. Photographs of the ceramic pieces in question were used as illustrations. (See Appendix E for sample page.) Such terms as ceramics, terra cotta, and sculpture were introduced in one.

Booklets were also developed using drawings made and presented to the researchers by the children. The drawing of the first such books was initiated by a Negro E boy who brought his completed modelling to the

researcher saying, "I'm going to draw a picture of you!" This drawing was placed into a booklet (See Appendix E) with simple sentences concerning it in relation to the art ideas of the study. It was presented to the Negro E teacher to share with her children at the next session. She, for the first time, indicated a measure of real interest in the work. This book also had the effect of stimulating these children to draw pictures for other books, their ideas ranging from "Portrait of Mr. Peterson","Girls," "People," to "People and Birds." The interest expressed in these procedures could indicate that a different kind of in-service education of teachers or a longer period of in-service education is needed.

Time

There seems to be no relation between length of sharing session, verbalization, and mean product scores made by children following it except for the Negro C group. This teacher had consistently the shortest discussion times (range of 3 to 6 minutes with a mean of 4.6). In contrast the Negro E group had the longest sessions with a mean of 17.4 minutes. Her longest session was 23 minutes on the 3rd. The white C and white E group mean times were very close, 9.0 and 10.2, respectively. In view of the difference in scores one might question the methods of teaching of the two teachers. The white E teacher was more successful with less demand for attention from the children.

Stimulus

From the data, it becomes apparent that for these children significance of stimulus varies with ceramic piece shared and with groups sharing it. The most significant piece for white E and negro E groups was the Bull (5th session) for both verbalization and clay products. For white C the most significant piece was Lady (6th session) for both verbalization and clay products and for the negro C the Bird (2nd session) was most significant for verbalization and Handies (1st session) and Bull (5th session) tied for clay products.

For the white E and white C the Bird (2nd session) was the least significant piece from the standpoint of clay products but not verbalization. For verbalization Handies (1st) and Indian Pot (4th), Bull (5th) and Chicken(7th) tied for low in the negro C gruop. Handies (1st) was lowest for the white C and white E in verbalization. It is evident from these scores that differences in groups require different ceramic pieces. In-service teacher education is not enough. A wide variety of materials is needed to meet the needs of all children.

Chapter V

Conclusions, Implications, and Recommendations

I. Conclusions

The study had two major objectives. It investigated 1) the effects of in-service teacher education involving basic art ideas in ceramics with culturally deprived 6 year old children and 2) whether or not there was a difference between Negro and white children and their teachers.

Verbalization

1. There was a significant difference between E and C groups on each of the four criteria, the C group score never equalling the E scores on any criterion.

2. There was a difference between the Negro and white group by criterion, the latter exceeding the former on all four criteria though the scores were closer than the E and C.

3. The Negro E group exceeded the white E on Crtierion III, how did he do it.

4. The white C group exceeded the Negro C on all four criteria.

5. When the scores were considered by sessions the E group far exceeded the C group. The high score of the C group exceeded the lowest score of the E by less than one point.

7. The white C clearly exceeded the Negro C on all sessions.

Products

1. There was a real difference in the products of the E and C groups between first and last sessions. A statistically significant difference at the .01 level in favor of the last session was found for the E group whereas no statistically significant difference at the .05 level was found for the C group.

2. There was a difference between mean product scores of E and C groups after their first session. The E group achieved an over-all mean score of 4.6 and the C group a 3.9, the same as their initial score.

3. There was a real difference in the products of the W and N groups between the first and last session. A statistically significant difference at the .01 level in favor of the last session was found for the W group whereas, no statistically significant difference at the .05 level was found for the N group.

4. The W group maintained a higher mean product score than the N group on all sessions coming closest on the 2nd session (0.1) and being farthest apart on the 6th session (1.4). The W over-all mean was 4.6 and the N, 3.8.

5. There was a difference between the individual groups of teacher-children. The largest difference was between the white E and negro C (over-all mean product scores of 5.1 and 3.6) and the least difference between the white C and the negro E (over-all mean product scores of 4.4 and 4.3). That is to say that the white E did better than the negro E, the white C better than the negro C, and the white C a little more than equalling the negro E. The development of the White E was a more or less steady climb, that of the negro C a somewhat even downward trend, and for the other two groups, a fluctuating pattern over the seven sessions.

6. The boys did better than the girls in each of the groups with the exception of the white E boys who were equalled by the white E girls in over-all mean product score.

7. The clay product response to the ceramic piece shared differed among the groups, the peaks and lows for the groups being quite different.

II. Implications

1. Organizing art programs around basic art ideas is a sound approach and this method of in-service teacher education is both possible and effective.

2. There is a difference in the way teachers respond to in-service education and, therefore, there is a need of exploring ways of involving individual teachers.

3. Different groups of children respond differently to the same visual art stimulus . This needs to be taken into account when planning.

4. In this study clay was found to be particularly good for boys. Teachers who feel that this media is difficult to handle may be penalizing the boys in the classroom.

5. There was evidence that working in depth in clay had carry over in other art media the children used. In the white E group particularly the children's drawings increased in richness of symbol. The resource teacher noted that this group's drawings were more mature than any of the other first grade classes she had visited. Yet this one had been considered the least mature of the four first grade groups in this school.

6. In this study it was found that art could not be separated from the other areas during the school day. The motivation to work in clay overflowed into areas as bulletin boards, displays, and units of work. Ideas presented during the clay session as texture and exaggeration were used in drawings by children with conscious effort.

7. Teachers are not as well founded in basic art ideas as they seem to be in other subject areas. There was a tendency for a control teacher to use art resource materials to illustrate concepts such as ellipse, circle, triangle, and angles only with a scientific approach.

8. Experience stories evolving out of this study motivated children to want to read when basal readers had become boring. Teachers need help in using children's art experiences as a basis for experience charts.

9. A rich opportunity is overlooked for building basic understandings in art through simple verbal visual presentations in booklet form. These children were able to comprehend and use such terms as ceramics, glaze, slip, and kiln because they had meaning for them.

10. Children need technical help in carrying through ideas when working in art media. The use of aides in the classroom for this purpose could pay rich rewards.

11. Administrators can be helped to see the importance of in-service education.

III. Recommendations

1. There is a need for year-round institutes helping teachers:
   A. To understand basic art ideas giving them a background of information to use with children.
   B. To pose appropriate questions which stimulate children to observe and discuss art works and to put the ideas into action when working with art media.
   C. To develop art curriculum in sequences using basic art ideas.
   D. To develop visual and verbal art materials to use with children.
   E. To understand how to utilize children's art work as a basis for helping them to observe, discuss, and understand art ideas; and to grow in self-awareness and self-actualization.

2. This type of research should be continued through the grade levels involving other kinds of art as well as ceramics.

3. A study should be made of the differences in the way teachers respond to this kind of in-service teacher education.

4. Further studies should be made to acquaint teachers with the kinds of art materials suitable for boys as well as girls.

5. School administrators need to be encouraged to attend teachers' art institutes in order to support teachers in implementing art programs.

Chapter VI

Summary

The purpose of this study was to determine 1) what effects a teacher helped to understand basic art ideas would have on the development of these ideas of culturally deprived six year old children as expressed in their verbal language and in their art products in clay, and 2) whether or not there would be a difference in the development of these ideas between Negro and white cuildren and their teachers.

The subjects were 110 six year old children from culturally deprived areas in Leon County and their 4 teachers. An experimental group of 54 children with their 2 teachers and a control group of 56 and their 2 teachers were used.

The study covered 7 sharing sessions for each group at least two weeks apart. These sessions were held during a regularly scheduled discussion period at which time a piece of ceramic art work and other related visual art materialwere shown to the children. Before each session the teachers of the experimental groups were helped to understand the basic art ideas underlying the pieces and to pose appropriate questions concerning four basic art criteria: (I) what is it, (II) who did it, (III) how did he do it, and (IV) could he do it with another material. The control teachers were given no help.

After each discussion session the experimental children were asked, "Can you 'talk' with clay?" and were given assistance and technical help by their teachers and researchers when needed. These teachers were encouraged to emphasize these art ideas at opportune moments during the two weeks between sessions. The control children were furnished clay but no help for their work period.

The discussion sessions were taped, transcribed, and rated by three judges on a descriptive continuum scale for each of the four criteria. The clay products produced by the children were photographed by Polaroid camera immediately after each child finished and any comments made by the child were attached to the photograph. Both were mounted and coded. Three judges rated these on a verbal and visual scale based on the use of the medium.

Findings

There were real differences in the verbalizations of the children. The experimental group exceeded the control groups on all criteria and

for all sessions. The white group exceeded the negro group on all sessions and on all criteria.

For the clay products in both the experimental and the white groups significant differences at the .01 level in favor of the last session over the first were found. No significant difference at the .05 level was found for the control and negro groups.

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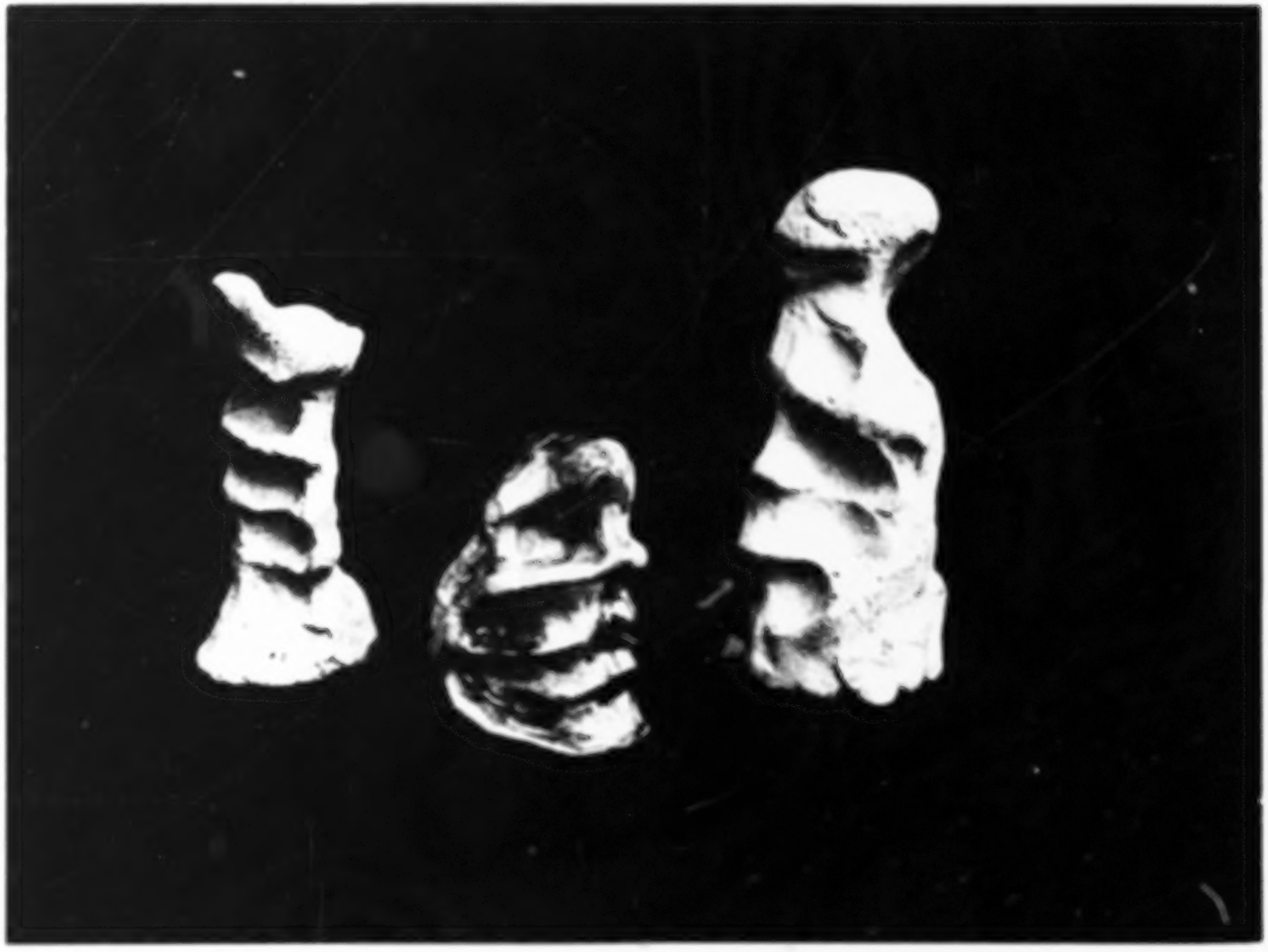
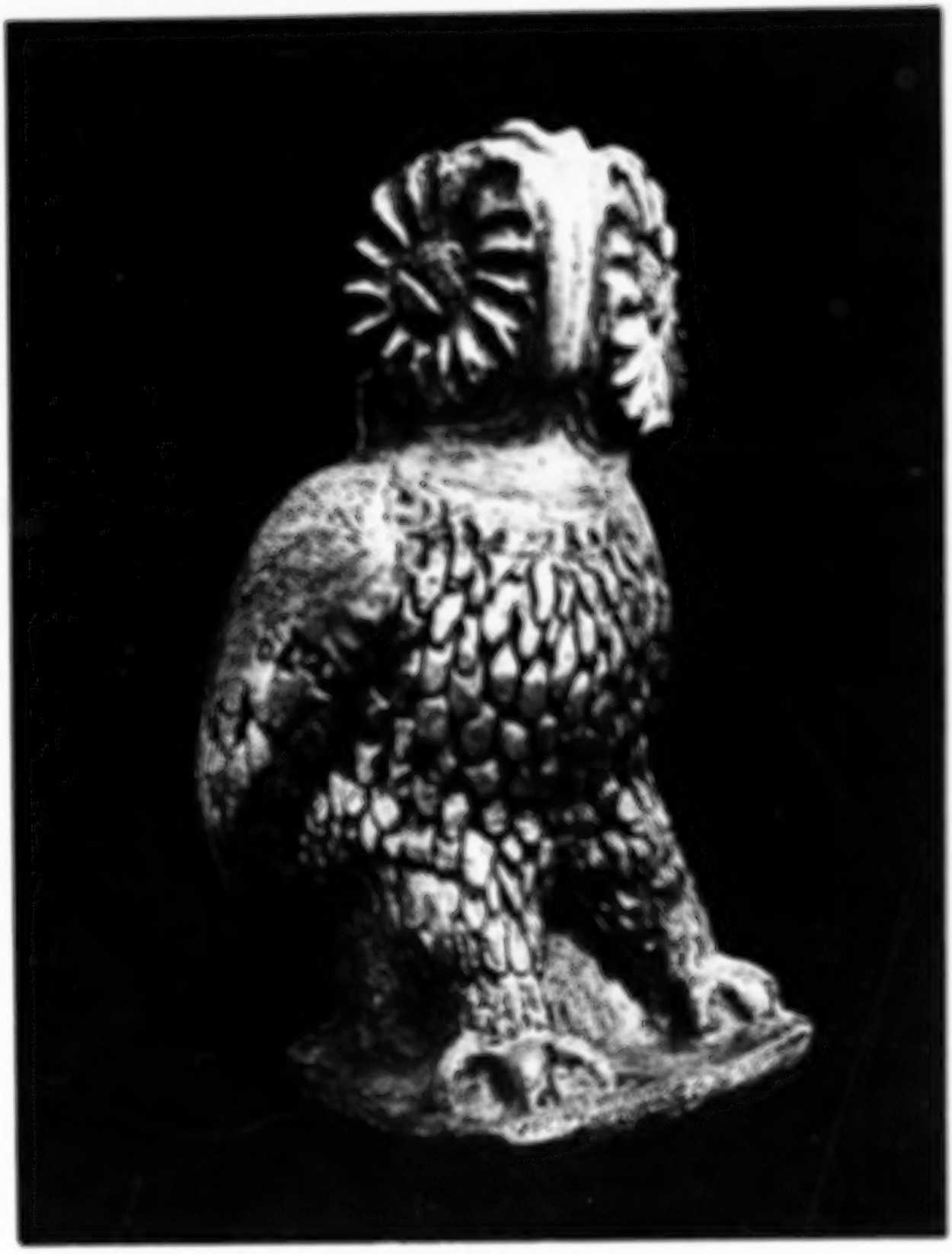
Appendix A: Photographs of Ceramic Pieces and Sample Visual Auxiliary Material.



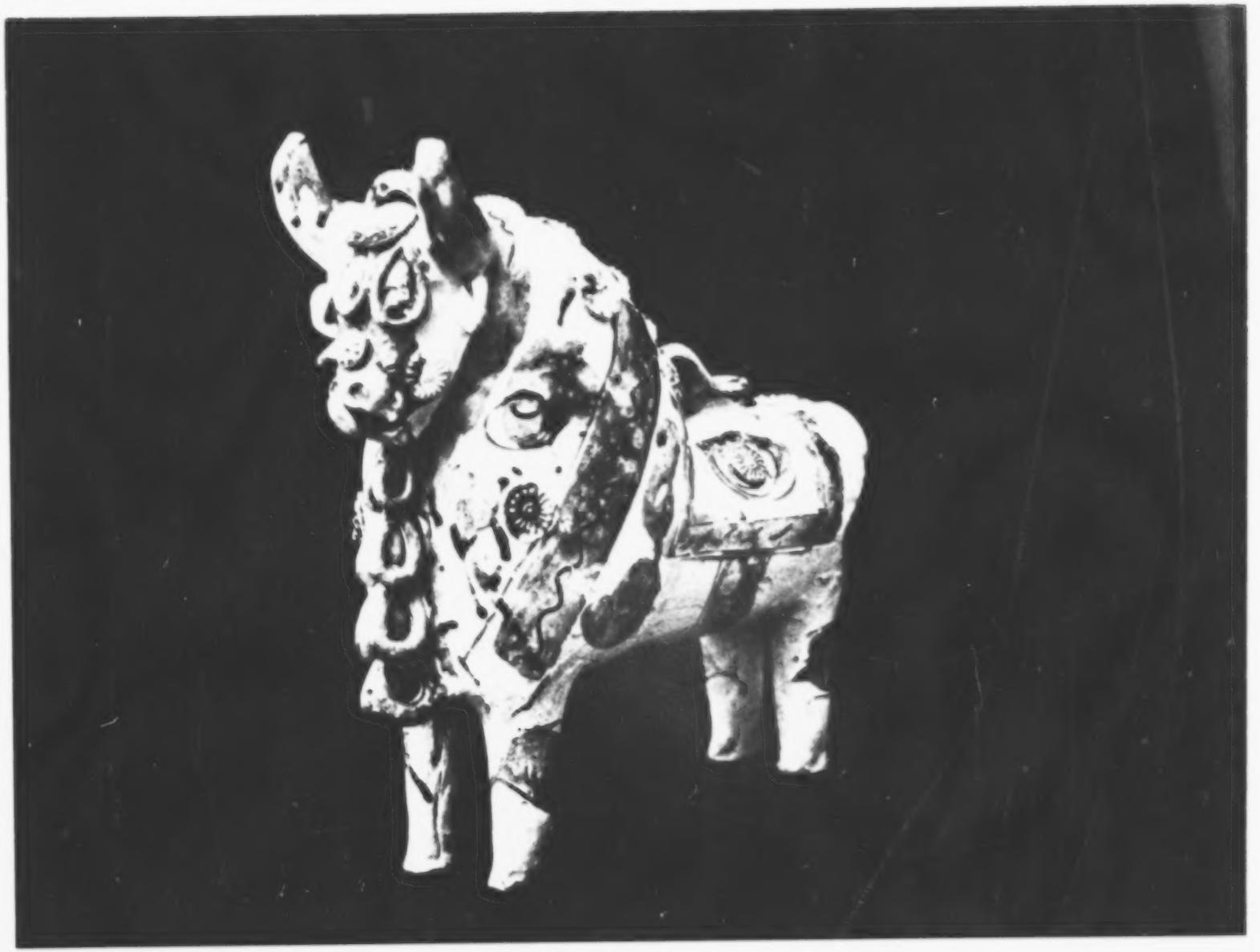
HANDIES (First Session)

BIRD (Second Session)



OWL. (Third Session)

INDIAN POT (Fourth Session)



MEXICAN BULL (Fifth Session)

LADY (Sixth Session)

CHICKEN (Seventh Session)

SAMPLE VISUAL AUXILIARY MATERIAL

Appendix B: Tables

TABLE I

QUESTIONS AND ART IDEAS FROM WHICH THEY DERIVE

Questions for Art Structured Discussion	Aspects of Structure of the Subject of Art*
What is it?	I. Art is a means of non-verbal communication. Does the child understand that by moving (manipulating) the clay he can communicate to other people?
Who did it?	II. The art product is the embodiment of the idea of the artist who created it. Does the child understand that his modeling is his idea?
How did he do it?	III. The visual embodiment of the artist's idea reflects the perceptions, sensibilities and judgments of the artist, the process and product are reciprocal. Does the child understand that his handling (manipulation) of the clay is related to what he understands, what he really sees, and what he chooses as his purpose?
Could he make it with his crayon (an alternate material)?	IV. The artist in the past has chosen, and the artist today can choose, from a variety of material in order to realize his purpose. Does the child understand that clay is only one of many materials he can use for his expressive purpose?

*From Arnold, L. Rose, A STUDY OF ASPECTS OF ART EDUCATION FOR FOUR-YEAR OLD CHILDREN: The Nature of Some Relationships Between Their Work in Selected Art Materials and Their Verbalization Concerning the Selected Work of Others. Master's Paper, Department of Art Education, Florida State University, 1963.

TABLE II

RATING SCALE FOR TRANSCRIPTIONS

A. What is it?	a. Identification: is, looks like b. Made: not real or man-made c. Material: clay d. Interpretation: it's a proud bird, a funny lady, etc. e. Design: it's a round thing, a tall thing, a squat shape f. Statue, sculpture	One element	wth*	1
			woth*	2
		Two elements	wth	3
			woth	4
		Three elements	wth	5
			woth	6
		Four elements	wth	7
			woth	8
		Five elements	wth	9
			woth	10
		Six elements	wth	11
			woth	12

B. Who did it?	a. Make(r): implied or stated b. One who says something, has an idea c. Artist: stated d. Differentiation: a sculptor, a potter, a painter, a weaver, a carver, an architect, etc. (Two with a or b; ½ point in addition for each two beyond this) e. Explicit name of artist: as Hurst, or own personal identity with a or b	One element	wth	1
			woth	2
		Two elements	wth	3
			woth	4
		Three elements	wth	5
			woth	6
		Four elements	wth	7
			woth	8
		Five elements	wth	9
			woth	10

cont'd.

C. How did he do it?	a. Pat, poke, pinch, roll, twist, etc. (at least three) b. Use tools (at least three) c. Pull out or add to or dig out (½ point for each additional one) d. Surface treatment (texture or add glaze) (½ point additional for both) e. Fire it in kiln f. Made a stable structure (standing, parts to whole, hollow to dry evenly, etc.) (½ point for each additional one)	One element	wth	1
			woth	2
		Two elements	wth	3
			woth	4
		Three elements	wth	5
			woth	6
		Four elements	wth	7
			woth	8
		Five elements	wth	9
			woth	10
		Six elements	wth	11
			woth	12

D. Could he do it with another material?	a. Yes (stated or implied) b. He could draw, paint, weave, print, carve, cut & paste, etc. (any three with ½ point for each two additional) c. Yes, but it would be different d. It would be different in this way (know a way it would be different in another material) (½ point for each additional different way)	One element	wth	1
			woth	2
		Two elements	wth	3
			woth	4
		Three elements	wth	5
			woth	6
		Four elements	wth	7
			woth	8

* wth--with teacher help
* woth--without teacher help

TABLE III

CONTINUUM RATING SCALE* FOR USE WITH CHILDREN'S CLAY PRODUCTS: Ability to Control and Manipulate the Medium (Used with a Visual Scale)

Points	Description of Product Criteria
1	Clay relatively unchanged from the mass given to the child
2	Clay slightly manipulated If built of parts, they barely touch in joining No actual three-dimensionality
3	If built of parts, beginning of joining Beginning of actual three-dimensionality Beginning of surface attention (texture)
4	If built of parts, joining by really squeezing them together More concern for three-dimensionality Little more attention to surface treatment (texture) Beginning of uprightness
5	If built of parts, beginning fusing with slip evident Definite three-dimensionality Even more attention to surface (texture) Upright definitely
6	Entire piece three-dimensional quality Upright with consideration of the limitations of the medium Definite attention to technique: if parts used, fusing apparent; surface treatment (texture)
7	Further refinement of aspects mentioned under Level 6

* Criteria: If built of parts, fusing them
Three dimensionality
Uprightness with attention to limitations of the media
Attention to surface treatment (texture)

Appendix C: Samples of Transcriptions (two)

Transcription of Seventh (last) Sharing Session by Second Control Teacher and Her Class of 6-year Old Children Sharing the Sculpture, Big Chicken

T*: Good! Adora, what is this, Adora? What....animal has what on it? Skin or feathers or what?
C: Feathers.
T: Alright.
T1: Feathers, very good.....
T: I showed this animal....it's what?
Ca: A bird.
T: Bird. That's right. Alright, who can tell us what it is? Alright, Kathleen?
T1: We thought they might want to stand right around there and look at it. Do you want to stand around and look at it?
T: Yes, alright. A rooster? Think about it.....(?) Early in the what? (Unclear) The morning, that's right. Just like the story we had in the reader....they got up...early in the morning...and went where? Where'd they go early in the morning? The mother and who? Mother and who?
C: Father.
T: Not mother and father...Mother and who went off early in the morning? Huh? Huh? No...children didn't go early in the morning.
T1: Who went early in the morning?
T: Where did they go early in the morning? In your reading lesson? And they went to buy some what? Shoestore...that's right.
Ca: Oh....Oh....(exclamations)
T: Yeah, that's pretty. I think they should try to draw that. That's nice. We like all these feathers....that was....(?)
T1: Bubblegum...yeah...
Ca: Oh...Oh...that's so pretty.....right there.....
T1: Why do you think it's pretty?
Ca: Cause it's pretty...it looks...(?)
T: That's the what? What is that? The tail, yeah...
Ca: I know....(?)
T1: And we have one more we thought they'd like.....
T: That's a little pattern on cloth...or something...
Ca: Oh...oh...ah...it's pretty...
T1: Yes, it's real pretty.....
T: Now, don't tear it... be careful with that sample of a cloth... they know...you can't tear. Now she's not having any experiment where you what?.....(?) Alright, now, everybody, get in your place; now you should know where your place.....

---

* Hereafter "T" will refer to the control teacher, "T1" to the researcher, and "C" and "Ca" to child and children, respectively.

Transcription of Seventh (last) Sharing Session by Second Experimental Teacher and Her Class of 6-year Old Children Sharing the Sculpture, Big Chicken

T1:* OK. Then this is what we have for our last time and we want you to tell us everything you can think about it.
Cs: Gollee....that's a rooster.
T1: It's a rooster? What else? (noise)
T: What is this, boys and girls?
Cs: A rooster...a rooster...
T: A what?
Cs: A rooster....a bird...
T: Please raise your hands, you don't wanta all talk together, do you?
C: No.
T: Raise your hand and I willcall on you...(noise) Uh, what is it Michael?
C: A rooster (unclear)
T: It's a rooster? Alright, what do you think it is, uh, uh, who is that? Marshall?
C: A rooster.
T: Does it look like a what? A rooster? Um, Jerome?
C: It look like a dragon.
T: Look like a what?
C: A dragon.
T1: A giraffe?
T: A giraffe?
Cs: A dragon!!
T: A dragon.
T1: Dragon...dragon...oh!
T: Alright, Gina?
C: It look like a rooster.
T: Look like a rooster? And where is he looking?
Cs: Up...up...in the air....
T: Alright, who did this?
Cs: The artist. (unison)
T: Alright, the artist made this. Alright, and how did he do it? How?
Cs: With clay.
T: Alright, he did it form clay. What color is this clay?
Cs: Brown.
T: Alright, uh, someone tell me--who would like to.....

---

* Hereafter "T" will refer to the experimental teacher, "T1" to the researcher, and "C" and "Cs" to child and children, respectively.

C: I do!
T: Just give me a little discussion on how you think the artist did it, and, uh, how did he use the clay and what did he use... tell me a little of that--uh, Katherine?
C: He made it out of clay and he pasted water on it.....(?)
T: You think he pasted?
T1: He put water on it when--uh huh--that's right.
T: Alright, how did...what, what do you think the water..when he put the water on he was doing what? What'cha call that?
Cs: Glazing.
T: No. What do'ya call that?
Cs: Slip...slip...
T: Slip, that's right.
T1: Uh huh.
T: Alright, it's called slip when he's using the water to slip, uh, these little pieces together so they won't what?
Cs: Fall off.
T: Fall apart, right. Alright, uh...
T1: I wonder if they know how he might have gotten the head up here?
T: How do you think.....
C: Glazed it.....(unclear)
T: How do you think he got the head up, Gina?
C: He rolled a big ole ball...
T: He rolled a big ball of clay and then he did what. Barbara?
Cs: He pulled it...pulled it....
T&T1: He Pulled it!
T: Good you can see that he pulled it and then he did what?
Cs: Glazed it....
T: No, he didn't. This is not glazed.
Cs: Slipped it...slipped.
T1: Slipped?
T: He slipped what?
T1: Wonder how he got this?
T: How did he get this? What is it, a beard? What is this?
Cs: With his hand....(in background)
T1: That would be a headdress, wouldn't you call it? A cocka--- like the cockatoo? Or a fancy rooster?
C: He squeezed it up like that.
T: That's right. He pulled it up and then he had to do what?
T1: He slipped it up.
C: He rolled it and then he patted it.
T1: He rolled it and then he patted it.
T: He had to what? Had to pat it? And he had to----seems like, he had to....took what? He took his what and did this?
T1: When you do this...(gesture)
C: Finger.
T: His fingers? That's right. He.....
T1: And what do you do when you do this? (gesture)
T: What is he doing when you do this?

T1: What do'ya do?
C: He pinched it.
T&T1: He pinched it!
T: And what other word could you use?....(noise)
T1: What else? What else?
T: Or he mashed it...mashed it...that's right.
T1: Mashed it, very good.
T: Who would like to tell me how, how these eyes are made? How do you think the artist made these eyes?
T1: Here's someone over here, Mrs. T.
T: Alright, uh, Tony?
C: (noise)...they got a pencil....
T: Or he could have taken a pencil.
T1: Pencil.
T: And then what, Tony?
C: I know....
C: And draw it around.....(?)
T: Good. And draw around it!!
T1: He could have drawn it around. Yeah, carried it around...(?)
T: Alright, what did you want to say, Melvin? Melvin?
C: I know, Mrs. T.
T: What would you like to say, Melvin? Huh? (noise) He took a what?
Cs: Razor...knife...(shouts)
T: What do you want to say, uh, uh, Jacqueline?
C: I know....a fork....
T: He could have taken a....the back of a fork, right. I mean, what? The handle of it?
T1: Could he have made the eyes in a different way?
Cs: Yeah....
T: Antoinette?
C: He, he punched 'em down like that and he made a big ole circle like that....(unclear)
T1: Uh huh...
T: He pushed it down and made a big ole circle. Now what is this back here?
Cs: His tail!
T: Alright, how do you think he made this tail?
Cs: He got a hold of it and----------(?)
T: Wait a minute, I can't.....
T1: Can't hear.
T: I can't hear everybody at one time. I only wanta hear one person tell me--what do you wanta say, Harry?
C: Make.....he he pasted the tail.....(?)
T: Alright, he patted the tail with his hand?
T1: Patted it.
T: How do you think he got it on here, uh, Gloria?
Cs: Pulled it...slipped it....glazed it.....
T: Alright, he slipped it with what?

Cs: Water!
T: Alright, um.....(noise)
T1: I wonder how he got this rough feeling here.. how did....
C: With his fingernails?
T: With his fingernails? What other way?
C: I know....a knife....
T: With a knife? (noise)
T1: With a knife?
T: Alright, Marshall, what other way could he use?
C: His finger
T: With his finger? What other instrument do you think he could have used, Wilfred?
C: Bottle.
T: Huh? A fork? To get this roughness?
T1: I wonder if he could have put the eyes a different way? How could he have made the eyes different?
T: David?
C: He, uh, he got, uh.....
T: How could he have made the eyes a different way form the way they are now?
C: He got a---------(unclear)
T: Could he have made this.....is this a rooster?
T1: It's a it's a hen or a rooster...could be...
T2: It's a bird of some kind.
T1: A bird of some kind.
T: That's right.
C: Looks like a bird!!
T: Look like a rooster?
T1: It looks like a rooster.
T: Uh, listen....
T1: Could he have added eyes on maybe? (pause) Some of you add eyes on....
T: How, Antoinette?
C: He dug around and around like that...
T: Yes, but, uh, could this bird's eyes could have been made any other way? Katherine?
C: They could have been like owl's.....
T: They could have been made like owl's.....
T1: Uh huh...
T: Alright, uh, what about this is what is this called? The what?
Cs: Wings...the wing...round....
T: Alright, the wings. How do you think the artist might have made this?
Cs: With his hands.....fingernails.....
T: Huh? That's right, he could have.....?
(noise and shouts)
T: Um, Jerome?
C: He probably put a knife and.....(?)

T: He probably put a knife and.....(?)
T1: A knife.
T: That's right and pushed the clay He could have used something else..What else could he use?
C: He rubbed it.
T: What could he use, Antoinette?
Cs: A knife.....(unclear).....fingers.....
T: Fingers.....uh, Barbara?
C: Uh, he got a screwdriver and pushed it down.....
T: He could have gotten a screwdriver and pushed it down... Alright, tell me this--uh--
T1: How did he get it hard, do you suppose?
T: How do you think this artist got this piece of uh, clay hard like this? Huh?
Cs: Baked it...baked it...(unison)
T: Alright, he baked it.
C: He put it in the sun.
T1: Baked it in what?
T: In what?
Cs: In the oven....oven....
T1: What do we call that oven? Do you remember? What do you call that oven? Is it like, uh, Mother.....
C: Kiln.
T1: Kiln. Good for you! That was good. A kiln...
T: Alright, now this, this piece of clay has not been glazed, has it?
Cs: No.
T: A glazed piece of clay looks like what?
C: Glazed.
T: It look like what?
C: Glazed.
T: Look like what?
C: Glazed.
T: What?
C: Glazed.
T1: Glazed? Did someone say...?
T: Did you say glass?
Cs: I said glazed....he said glazed...
T: Uh, it look...is is is what?
It look like what?
C: Glazed.
T: It's shi--it's what?
Cs: Shiny?
T: That's right. It's shiny. It's shiny. Now this, this artist, uh, this is not a solid piece of uh clay here... What do you call this?
Cs: I know.....hollow.....hollow.....
T: The hollow in the re.....that's right.

T1: Why did he make it hollow?
C: He bammed it with a hammer.
T1: Why? Why? Why?
T: Why?
Cs: So it could stand up...(various unclear shouts)
T: So it could stand up?!
T1: If he hadn't dug it out, would it've been real heavy?
Cs: No...Yes...
T1: It've been too heavy .you couldn't have lifted it
Cs: (noise) I know...(mumbles) He made, uh, with a hammer...
T: Alright, tell me, boys and girls, who would like to tell me what other way could this bird have been made other than out of clay? What other way? Alright, Katherine?
Cs: Draw it.
T: Wait a minute! Katherine?
Cs: Crayon...crayon...
T: With crayon. Marshall?
C: With pencil.
T: Pencil, Gloria?
C: Knife.
C: I know....cut it out.....
T1: Cut it out with what?
Cs: Some scissors...scissors...
T1: With scissors.
T: Alright, Barbara?
C: You could paint it.
T1: You could paint it.
T: Alright, Antoinette?
C: You could dig it in with your fingers.
T: No, what other way could this bird be made other than out of clay? You know we can make many things.....
C: Paper.
T: Uh huh....
T1: How would you make it with paper? How would you make it with paper?
Cs: Cut it out.
T1: Cut it out? Could you think of another way?
C: Draw it.
T1: How?
T: You could draw it, that's right
Cs: Supposed to draw it .....cut it.....(unclear)
T1: Could you make it round like this with paper?
Cs: Yes.
T1: How?
C: Cut it out.
T: Alright, Harry?
C: You can.....(?)
T: Harry?

C: Pasting.
T&T1: Pasting?
T: Alright, there...I believe there are some other ways you could make this bird out of clay.....what other ways, uh, Wayne? (noise) What other ways...could this bird be made other than out of clay? This is what we're talking about now.
T: Alright, David?
C: With straw.
T&T1: With straw!! Yes.
T: That's right.
T1: We did have a woman in straw.
Cs: I know.....I know...cover...
T: What type of cover?
Cs: A sofa cover.....material.....
T: Material, that's right.
T1: That's what she was trying to say, uh huh.
T: Uh.....
T2: You know, I'm looking over here--here's a bird that somebody made and I'm looking here--here's a bird somebody made. Here's another one...Look at...Here's one. Look how different they are...look at this. Here's a bird and here. Look at this. Look at that. Look at all those birds.
T1: And they were made with pencil.
T2: And crayon.
T1: Is there anything else we wanted to ask them?
Is there anything you want to add about this?
T: Would you like to ask any questions concerning this bird? If so, raise your hand. Do you have a question? Do you have a question? Antoinette? What is it?
C: How that bird was made.....uh...to...if that's a real bird it could go and fly...(unclear)
T: You think he could fly? Uh, this bird...he could fly if he was what?
Cs: Real.
T: Real, that's right. So you kn;w that this is not a what?
Cs: A real bird.
T: A real bird. A real bird, a real bird can do what?
Cs: Fly.
T: Fly.
T2: This is a.....(noise)....bird somebody made.
Cs: I know.....I know who made it....
T1: Who?
Cs: The artist.
T1: And he had an idea...he wanted a bird that was what? Fat...
T2: And tall.
T1: And tall. And had a face and headdress. Now if you talk in clay what will you say?

T2: Don't tell us--now.
T1: Don't tell us...you just tell us in clay, like this artist. He talked to us in clay and he made a bird that was fat and longnecked.
C: I know....I know...
T1: Now you might want to tell us about something else in clay . well we.....
C: He wanted to make it pretty so us all of us...stand pretty.
T1: Pretty? Why did he want to make it pretty? So all of us could what?
Cs: Look and....(?)
T2: See it and...
T1: See it and what?
C: Look at it.
T1: Look at it and enjoy looking at it, yes.
T: Alright, would you like to make something in clay, now? Boys and girls?
Cs: Yes!!!

END

Appendix D: Experience Stories

Experience Stories Written by the White Experimental Teacher with her Children

1. After the Second Session

We played with clay.
We had fun with it.
We made things with it.
We mashed it with our hands.
We made it go around.
I made a circle for the top.
I pulled it around.
I smoothed it.
We pinched it to make holes.
We took pictures of it.
We made shapes with it.

2. After the Third Session

I pulled it.
I stretched the clay.
I banged it to make a ball.
I rounded it.
I curved it.
I stretched it to make a bird.
I squeezed it and pulled it out to make a tail.

3. Just prior to the Last Session

Dr. Douglas will come.
She will have something.
We will look at it.
We will talk about it.
Then we will get the clay.
We will make something too.

Experience Stories Dictated to Adult Helpers by
Individual Negro Experimental Group Children
After the Bull Sharing Session

1. By boys:

My Bull.

I made him in two balls.
I sticked his foot under there.
I made him two eyes.
Then I rubbed it and put his mouth on.
I named it Smokey the Bear.

This is a bird.
I pulled the clay up.
I rolled the wings.
Then I 'slipped' (slip) the wings on.

A table.

This is a bull sitting down.
I mashed him and sticked him.

He a duck.
Pull it out like that.

That's a ghost. Two leg ghost.

I mashed it.

Ash tray.
Made it with clay.
Put some water on it to make it stick.
Pulled it out.
I pinched it.
And padded it.
And now it's going to get all dried up.

Mine is a mountain.
It's a big mountain.
I rolled it.
I put water on it.

I balled it and rolled it.
I put more clay under his feet cause I thought it was going to fall down.

A soap.
I made it flat.

He can stand up...my burro.
He can stand up.
I glazed it.
I put water on it because it will make it stick like glue.
I put water on his ears, too.
The lump on his back is like the bull Mrs. T. showed us.

That's a cake.
It can stand up.
I did like this and put on bottom.
I put little holes in.
I put water on it, too.
Make it smooth.

It's a dinosaur.
It's standing up.

It's an ash tray.
I made this part first.
This right here is next.
I did round that way.

2. By girls:

Bull with horns.
A boy.
He's standing up.
Head.
Foot.
Eyes.

I 'slipped' (slip) it.
Smoothed it.
Smoothed its tail.
Fixed its legs with feet.
Punched eyes with pencil.
It's a bull.

Pancake and tree.
Patted it on.
Draw face with pencil.
Mashed it.

This is a bull.
I put slip on it right there.

Appendix E: Related Learning Materials

I found it up.
I pulled out his head, then his tail.
David Wallace

I circled it.
I stuck my thumb in.
I made a design on it.
Bob Kinsey

This is a picture of a bull.

The bull in the picture is made of clay.

The bull in the picture was made in Mexico.

The person who made this is called an artist.

He had an idea of a bull.

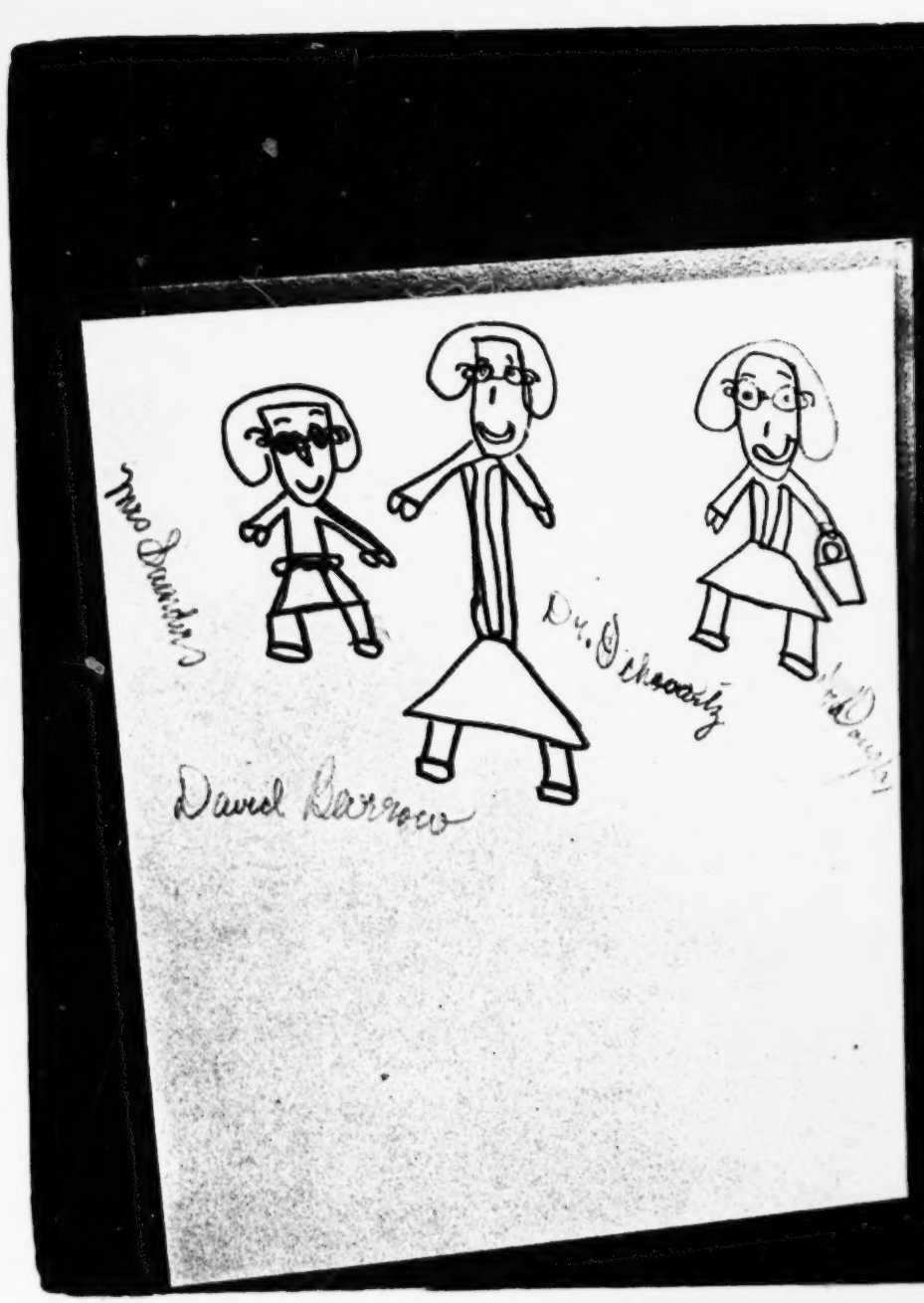
He put his idea into clay.

What is he telling us about a bull?

Is he telling us that the bull is proud?

Is he telling us that the bull is ready for a parade?

RESEARCHER'S STORY OF CERAMIC PIECE



This is a drawing by David Barrow.
David is in Mrs. Thomas's first grade at Southwest School.

David had an idea.
What was his idea?
David told us about three people he liked.
What did he say about them?

How did he tell it to us?
He made a drawing.

What material did he use?
He used a pencil.
How did David use his pencil?
He made heavy lines.
Some of his lines are curved.
Some are very straight.
Where are the curved lines? the straight lines?

Do <u>you</u> have an idea?
How will you say it?
What material will you use?
How will you use this material?

RESEARCHER'S STORY OF CHILD'S DRAWING